HomeSoft SOLUTIONS

KNX-control finally made easy!

HomeSoft Editor

User Manual

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1. Introduction : Before you start.

- You should have a **configured** and **working** KNX network.

- It is highly recommended that you have access to your ETS database, which was used to configure your KNX network. If you don't have this data, or don't have access to the ETS software, ask your KNX network installer to provide you the '**Export to OPC Server'** format file of your ETS project. (This is a .esf file) .

- You need a connection to your KNX network. The HomeSoft Software can work with most KNX-USB or KNX-IP modules/gateways. A **KNX-IP module/gateway** is recommended, as this is also needed when using iOS devices (iPhone, iPod, iPad).

2. General information

2.1. Supported Image Formats

The HomeSoft Software accepts the following image formats: BMP, GIF, ICO, JPEG, JPG, PBM, PNG, PPM, TIF, TIFF, XBM, XPM.

2.2. Supported Operating Systems

The HomeSoft **Editor** is tested and supported on the following platforms:

- Windows Vista (32 and 64 bit)
- Windows 7 (32 and 64 bit)
- MacOS 10.6 (64 bit)
- MacOS 10.7 (64 bit)
- MacOS 10.8 (64 bit)

The HomeSoft **Viewer** is testes and supported on the following platforms:

- Windows Vista (32 and 64 bit)
- Windows 7 (32 and 64 bit)
- MacOS 10.6 (64 bit)
- MacOS 10.7 (64 bit)
- MacOS 10.8 (64 bit)
- iOS 4.2
- iOS 5.x
- iOS 6.x

2.3. Notes:

- Both the Editor and the Viewer will also run on Windows XP, but it is not supported, which means that we can not guarantee the correct functioning of the software.

- The current version of the HomeSoft software does not run on Windows 8 yet.

3. Installing the Software

To download the HomeSoft Editor Software, go to the 'Download' section on the www.homesoftsolutions.com website.

Fill in the correct information, and you will receive a link to the latest version of the software by mail. Click on the link in the mail, the download will start automatically.

3.1. The HomeSoft Editor – MacOSX

The MacOSX will automatically ask you to uncompress the zip file. After doing this, the HomeSoftEditor.installer application can be found in your downloads folder.

Double click the HomeSoftEditor.installer, and follow the instructions on your screen.

When the software was correctly installed, you will find the HomeSoft Editor in your applications folder.

3.2. The HomeSoft Editor – Windows

The Installer will be saved in your download directory. Run the installer application (HomeSoft_Editor_Setup.exe).

When the software was correctly installed, you will find a link on your desktop.

4. Activating the Software

The trial version of the software allows you to create and edit projects, but the projects will expire after 30 days. This means that you will not be able to open the expired project in the editor, and the expired project will not start up any more in your HomeSoft Viewer.

In order to unlock your expired projects, you need to:

1: Buy a license for the HomeSoft Editor (from HomeSoft Website).
AND
2: Buy the Full version of the iOS HomeSoft Viewer (in the app store).

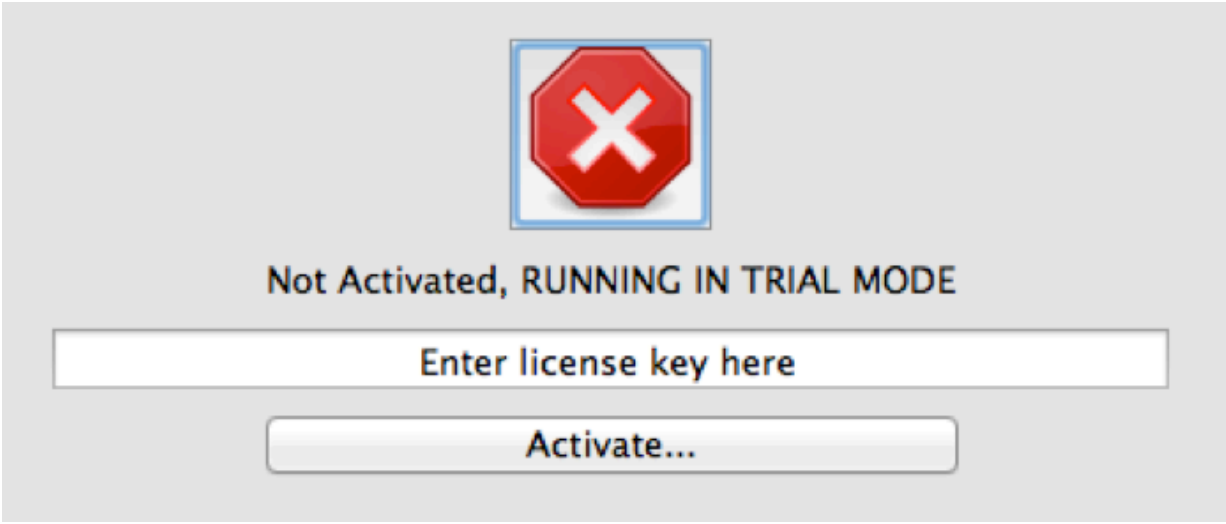
(www.homesoftsolutions.com/buy.html)

Buying a full version of the iOS **viewer** (on the Apple app store) means that you can install the Viewer on 5 different iOS devices if you use the same Mac ID to download the app (Standard Apple policy).

To activate your license for the HomeSoft **Editor** you need:

1. To buy a license key. Go to the website www.homesoftsolutions.com, click on the Buy button, and follow the instructions. You will receive your license key by mail after payment.

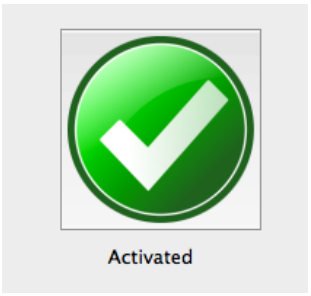
2. Go to the Activation window. You can access the Activation section in your project manager dialog.

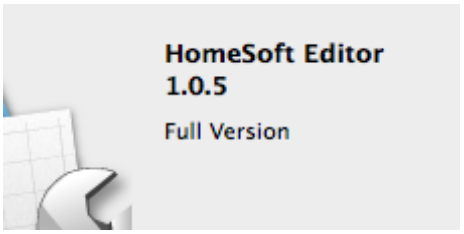


Enter the license key (use copy & paste to avoid typing errors) and press the 'Activate…' button. A key looks like this: 2X1U1-1LRF5-K12U2-QF9LB-000A1

3. A license key validity check will be done first. If you entered an invalid key, you will get an error:

4. If the validity check passed, the key will be send to the activation server. **You need to have a direct (no proxy server!) internet connection in order to activate your key**. If the activation was successful, a green icon will appear in your license tab. The startup 'Projects' dialog and the 'About' dialog will mention "Full Version".



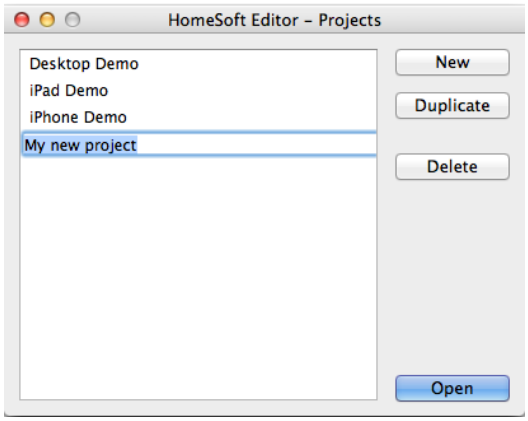


5. Remember that if you are viewing the projects on your iPhone, iPad or iPod touch, **you will also need to buy the full version of the HomeSoft viewer on the App store**. If you use the free 'Lite' version, the project will still expire after 30 days.

Note : If you are using the free MacOSX or Windows **Viewer**, there will be no expiry if the projects were send from the full (activated) version of the HomeSoft Editor.

5. Creating New Projects

When Starting up the Homesoft Editor, you automatically enter the project manager dialog. This dialog allows you to:



New :

Create a new empty project. This project will contain some default buttons and icons provided by HomeSoft Solutions. You can create up to 5 different projects in the HomeSoft Editor. If you need to use an unlimited number of projects, contact us for the **professional** version of the HomeSoft Editor.

TRIAL MODE : The time of creation will be remembered in the project, and the project will expire 30 days later. During those 30 days, you can use all the available functionality. There is no limitation.

Duplicate :

Duplicate an existing project. If you want to create a new, similar project, you can choose to duplicate an existing project. All buttons, icons, images, … which were used in the original project, will be available in the copied project.

TRIAL MODE : Duplicated projects will have the same creation date as the original project (so, duplicating an expired project will also be expired)

Delete :

Remove an existing project. The complete project will be removed from your hard disk drive.

Open :

Open and start editing a project into the Editor.

TRIAL MODE : If your project was created more than 30 days ago, the project will not open. You will be able to open expired projects again in the activated version of the HomeSoft Editor (you need to buy a license key to activate the Editor).

Rename:

If you want to rename a project, double-click on the name, and change the name.

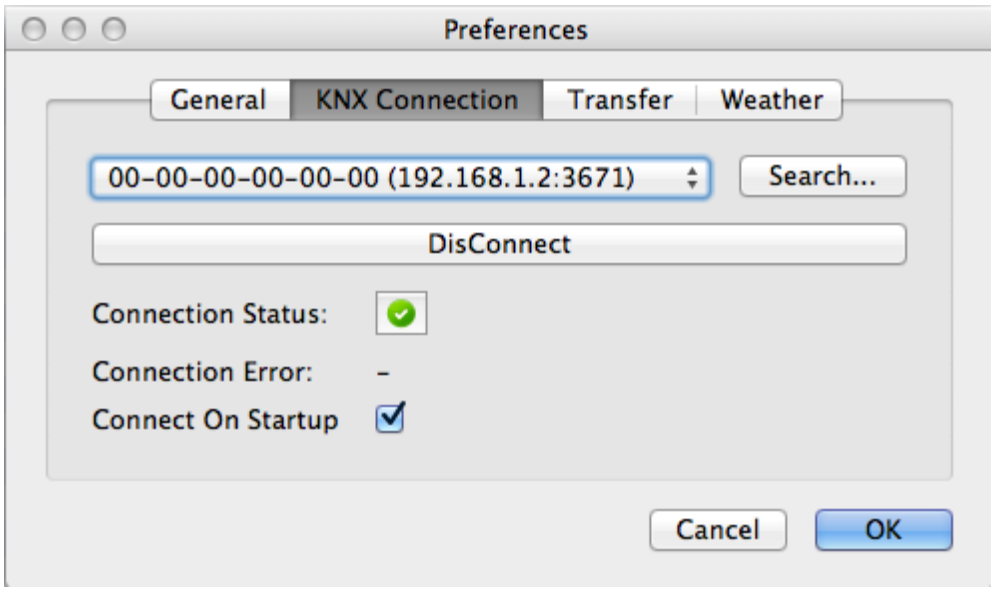
6. Setup your KNX-Connection

Open an existing project, or create and open a new project from the project manager dialog.

The KNX-Connection parameters can be found by opening the Application preferences dialog , or directly by clicking on the connection icon in the bottom left of your screen.

Press the 'Search…' button to detect any possible KNX devices. Both KNX/IP and USB devices will be detected. (Note: KNX USB devices on Mac will be detected, but will not work without the installation of a driver. A MacOS KNX/USB driver is usually not provided for MacOSX!)

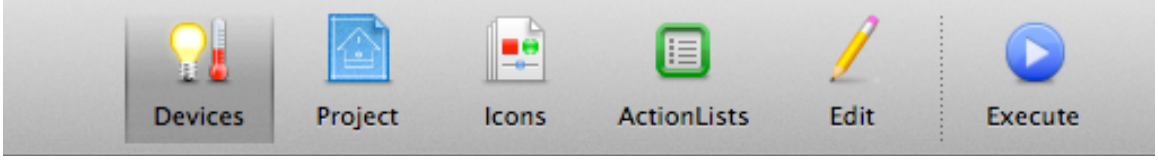
Select the correct device in the popup list, and press 'Connect'. If the device can be accessed, the connection status will switch to green. It is recommended to enable the 'Connect on startup' button to Connect automatically to the device when starting up the HomeSoft Editor.



Remark : It is not necessary to have an active KNX connection to create/edit you projects.

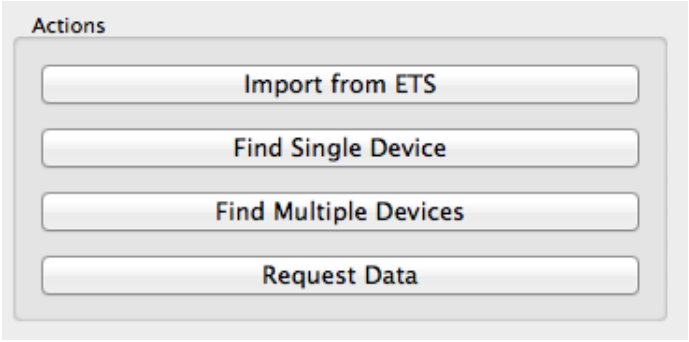
7. Defining your KNX Device Addresses

Go to the 'Devices' section.



7.1. Importing devices

There are different ways to get your KNX devices (addresses) into your project:



- **The fast way** : Import from ETS (recommended!)

  If you have access to your ETS project which was used to configure your KNX devices, you have the possibility to 'Export to OPC Server' format. This option can be found in the 'File' menu – 'Data Extraction' of the ETS software. This will create a .esf file.
  You can now import this .esf file directly into the HomeSoft Editor by choosing the 'Import from ETS' button.

- **The semi - automatic way** : find Single/Multiple devices (KNX connection must be active)

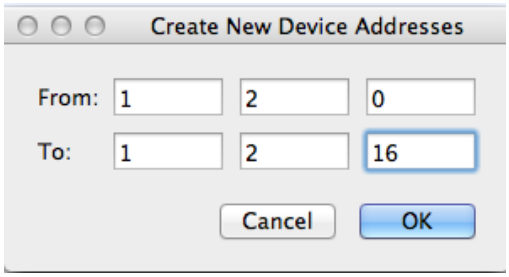
  This option will Scan your KNX network for device that are switched on/off, or when dimmers go up/down. So, while the editor is scanning, switch on/off all your lights, or go up/down with shutters, dimmers or temperatures for the device to get detected and registered.

The 'Find Single Device' option will stop each time a new device was detected, and you will be able to enter the name of the device.

The 'Find Multiple Devices' will continue to scan devices, until you stop the process. You can change the device names after the scanning. Use the 'Toggle data' and 'Send data' buttons (see further) to detect which address corresponds to which device.

- **The complete manual way** (you need to know the addresses of your KNX devices)

  Press the '+' button in the bottom-left of your 'Devices' screen to manually add KNX addresses to your project. You will be able to enter a range of KNX addresses.



You will also need to enter the correct description for each device.

7.2. Important Remarks

If you used the complete manual way, the created devices will have a type = 'Unknown'.

Name	Address	Type	Minimum	Maximum	Value
▼ dimmen					
bureel 2 spots 19 dimbaar	0-1-17	Unknown	???	???	???
bureel 2 spots 20 dimbaar	0-1-18	Unknown	???	???	???
Eetplaats	0-1-29	Unknown	???	???	???
wc badk ouders	0-1-48	Unknown	???	???	???
living 2x2 spots 13 dimbaar	0-1-52	Unknown	???	???	???
slpk ouders 4 spots 37 dimbaar	0-1-53	Unknown	???	???	???

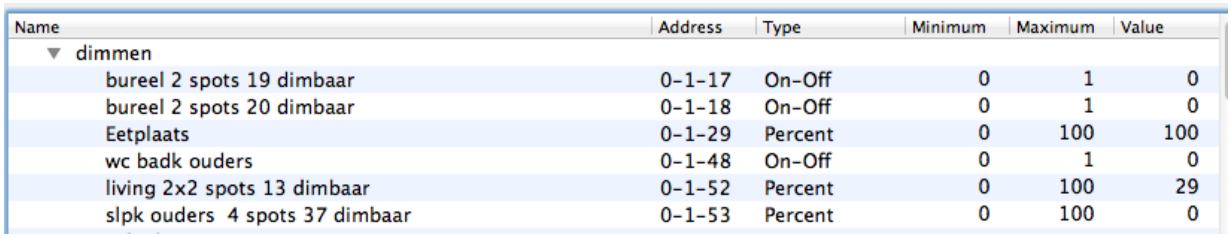
In order to use KNX devices in your project, a **VALID** type must be set. Finding the correct 'Address Type' can be done in different ways:

1. Using the 'Request Data' button. (The KNX Connection must be active!)
   Select a single entry in the list, a subgroup or a main group, and press the 'request Data' button. All entries in the group/subgroup will ask their type and value to the KNX network. Depending on how your devices were programed during the

installation of your KNX network, they will or will not reply on this request (see also Chapter 14.1 for more detailed information)

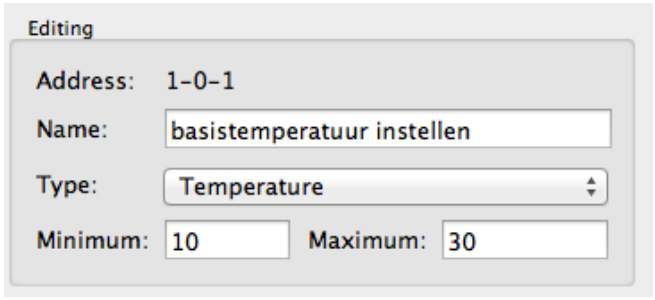
2. Leave your project open in the KNX Editor, and make sure your KNX connection is active. Now, go round your house switching your lights or devices on/off manually. The changes will be detected and your device types will then be automatically updated.

3. Select each device one by one in the list, and change the type manually by changing the type with the popup list in the 'Editing' section on the right.



Name	Address	Type	Minimum	Maximum	Value
▼ dimmen					
bureel 2 spots 19 dimbaar	0-1-17	On-Off	0	1	0
bureel 2 spots 20 dimbaar	0-1-18	On-Off	0	1	0
Eetplaats	0-1-29	Percent	0	100	100
wc badk ouders	0-1-48	On-Off	0	1	0
living 2x2 spots 13 dimbaar	0-1-52	Percent	0	100	29
slpk ouders 4 spots 37 dimbaar	0-1-53	Percent	0	100	0

7.3. Changing Device parameters



You can edit the name and the type of the parameter if you want. The minimum and maximum values can also be changed. By default the minimum and maximum values are set to the lowest and highest possible value for this type of object. These values are used when calculating the position of slider icons. (see multi-icon buttons)

TYPE : Possible types:

UNKNOWN : Default value. As soon as a KNX message comes into the system, and the type is 'unknown', the type will be changed automatically to the info from the KNX message.

ON-OFF : 1 bit values. Usually used for lights or sensors.

VALUE : 1 byte. Can have a value from 0 to 255. Is used for dimmers, Shutter position, valve status, …

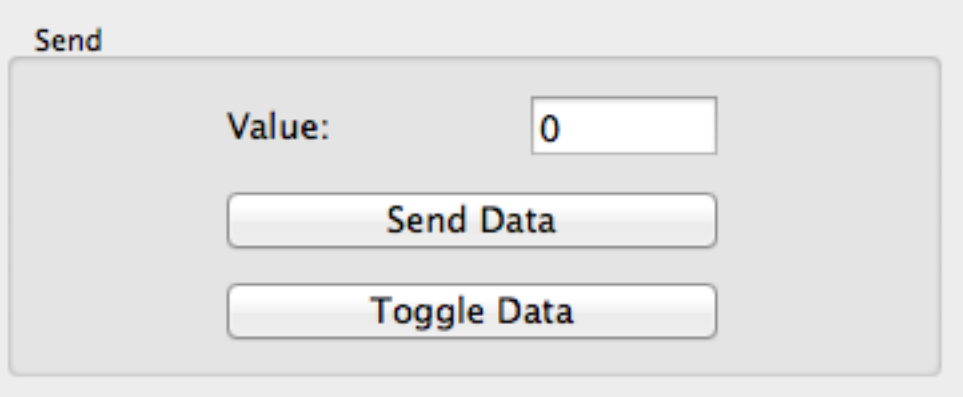
PERCENT : 1 byte. Special case of 'Value' type. (see note)

TEMPERATURE : 2 bytes. Used for getting or setting temperatures.

Note : What is the difference between 'Value' and 'Percent' ?

For e.g. dimmers and shutter positions, its is recommended to set the type to 'Percent'. (By default, they will get the 'Value' type) A Value object can have values from 0 to 255. A 'Percent' object will show and use values from 0 to 100 (Internally, they will still use values from 0 to 255). Percent objects will have more formatting options when you want to display the value on your project page. It will also be easier in the action lists to work with percentages (e.g. if you want to set the dimmer value on 50%)

7.4. Sending data to the KNX network

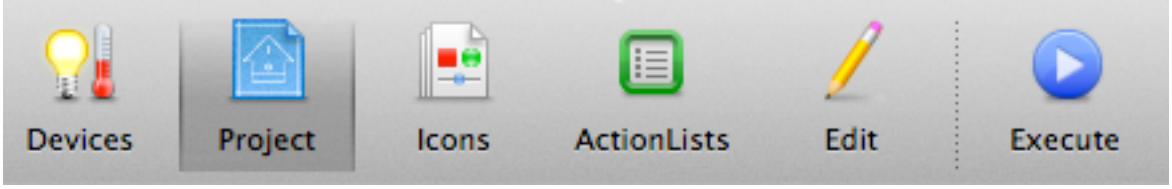


If your KNX connection is active, you can send data to the KNX device.

- Select a device in the device tree list.
- For ON-OFF devices, use the toggle button to switch the device on or off.
- For Value and Percentages, using the toggle button will toggle between the minimum and the maximum value.
- For all object types, you can also fill in the value you want to send, and press the 'Send Data' button.
- If the type is a 'percentage', enter values from 0 to 100, if the type is a 'value', enter values between 0 and 255, if the type is a 'temperature', enter degrees (in Celsius!)

8. Create your project pages

Go to the 'Project 'section.



In this section, you can define your project parameters. The most important part to start making your projects is the 'Pages' Section.

8.1. Page Parameters

Depending on the type of project you make (for Mac, Windows, iPad, iPhone, …), you should create some pages with the correct size for your viewer. Most page sizes are 'predefined', but you can always specify a 'custom' size.
Use the '+' and '-' buttons to add or delete pages in the project pages list. When the pages list is modified:

- The page popup in the bottom status bar is automatically updated.
- The 'goto page' activities in the edit window (see further) are automatically updated.

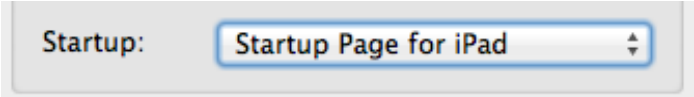
Create/add a few blank pages with the correct size for your project. Don't forget to give a meaningful name to your pages, as this will be useful later.

Remarks:

- The predefined page sizes:

  - 480 x 300 iPhone Horizontal (iPhone 3, iPhone 4)
  - 300 x 480 iPhone Vertical (iPhone 3, iPhone 4)
  - 568 x 300 iPhone5 Horizontal (iPhone 5)
  - 300 x 568 iPhone5 Vertical (iPhone 5)
  - 1024 x 748 iPad Horizontal (All iPad Models)
  - 748 x 1024 iPad Vertical (All iPad Models)
  - 1024 x 768 Desktop computer
  - 1280 x 1024 Desktop computer
  - 1680 x 1050 Desktop computer

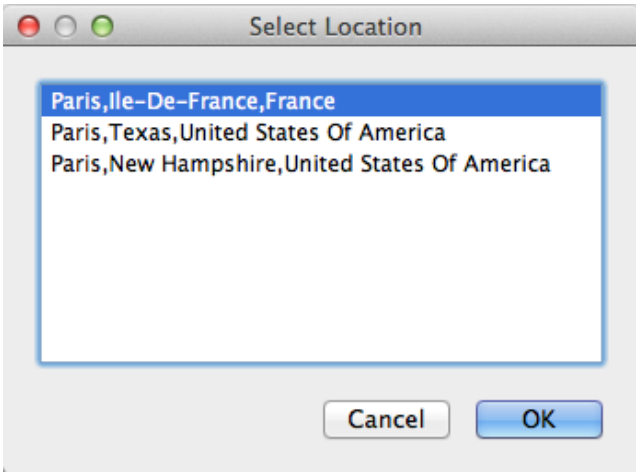
- By default, the first page will be used as a startup page when you start the HomeSoft Viewer, unless you define another page as startup page. Select a page in the page list, and use the startup popup in the bottom-left of your screen to define this page as startup. You can only define 1 startup page for each platform (iPhone, iPad, DeskTop, iPhone5)
- Because you can define your startup page for every devices, it is possible to create only one project for more than one device (e.g. for both your iPhone and iPad).



8.2. Project Parameters

8.2.1. Weather Location

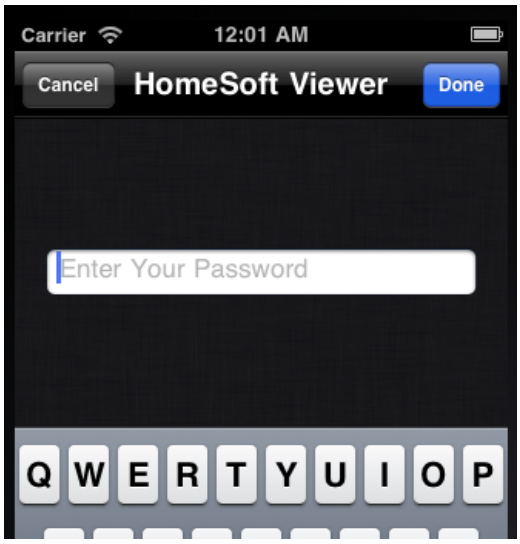
You can define only one weather location for your project. Enter the name of the city you want for your weather forecast. If more than one city matches your city name, you will get a list to choose from.



If your city is not in the list, or is not recognized, try with some other (bigger) city in the neighborhood.

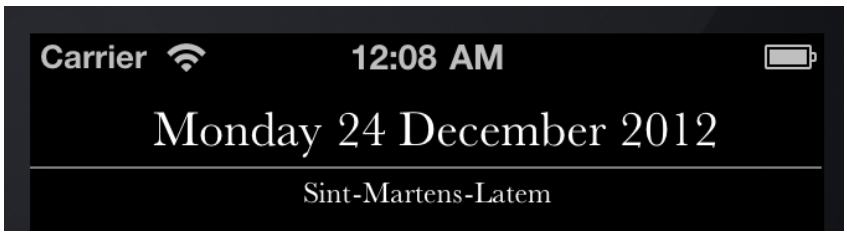
8.2.2. Login Password

If you want to protect your project in the HomeSoft Viewer, you can enter a password for the project. When the project starts up in the viewer, it will ask for the password. Only if you can provide the correct password, your project will open.



8.2.3. iPod/iPhone Status bar color

You can choose between a black and a gray status bar for the iPhone/iPad



9. Buttons and Icons

Go to the 'Icons 'section.

By default, some predefined icons will already be available for you in the project. If needed, you can add your own icons (use the '+' button in the right 'Icons' window)

Icons are used for buttons in your project. Buttons can be used for both changing and status reporting of a device value.

9.1. Button Types

9.1.1. Static buttons : Single icon buttons

This is the simplest button. It's a 'static' button (does not change), and can be used for any action :

- Executing an action list.
- Go to another page
- Exit application
- …

9.1.2. Dynamic buttons : Double and Multi icon Buttons

Dynamic buttons must be linked to a KNX Device. See further : 'edit section'.

Note : Don't attach an action list to a dynamic button (see further : edit section). If you do, pressing the button will execute the action list, but as action lists do not generate a return value, the state of the button will never change.

9.1.2.1. Double Icon buttons

This is a 'Dynamic' button. The double buttons are generally used for ON/OFF devices (e.g. a light). The double Icon button has 2 icons (2 states) : the first icon

will be shown when the device is ON, the second icon is shown when the device is OFF.

How it works:

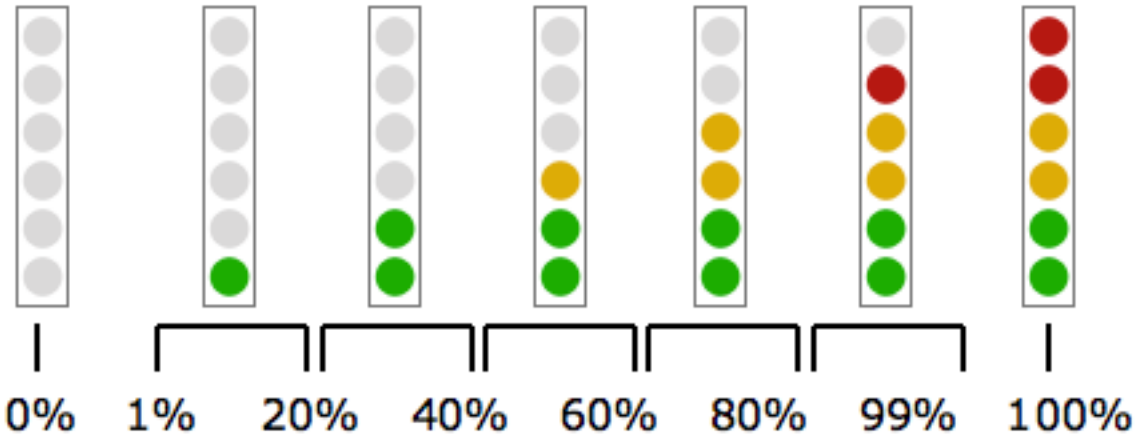
Pressing a double icon button will toggle the value of the attached device between his minimal and maximal value. The minimal and maximal value for devices can be set in the 'Devices' section. For an ON/OFF device, the minimum value is 0, the maximum value is 1. You can also use the double icon button for value or percentage devices (e.g. a dimmer). Pressing the button will then toggle between the minimal value (0%) and the maximal value (100%)

9.1.2.2. Multi Icon buttons

This is also a dynamic button, and can be used for Dimmers, shutters, temperatures, … Which icon will be shown, will depend on the value of the attached device. A Multi Icon button has more than 2 states.

How it works:

Lets take an example of a dimming light, which will be attached to a Multi-icon button (in this example : 7 icons/states). Depending on the value of the dimmer, one of the icons will be shown. The first and the last icon in the list will be used for 0% and for 100% (the minimum and the maximum value). All intermediate values will be equally divided between the other icons (5 in this example).



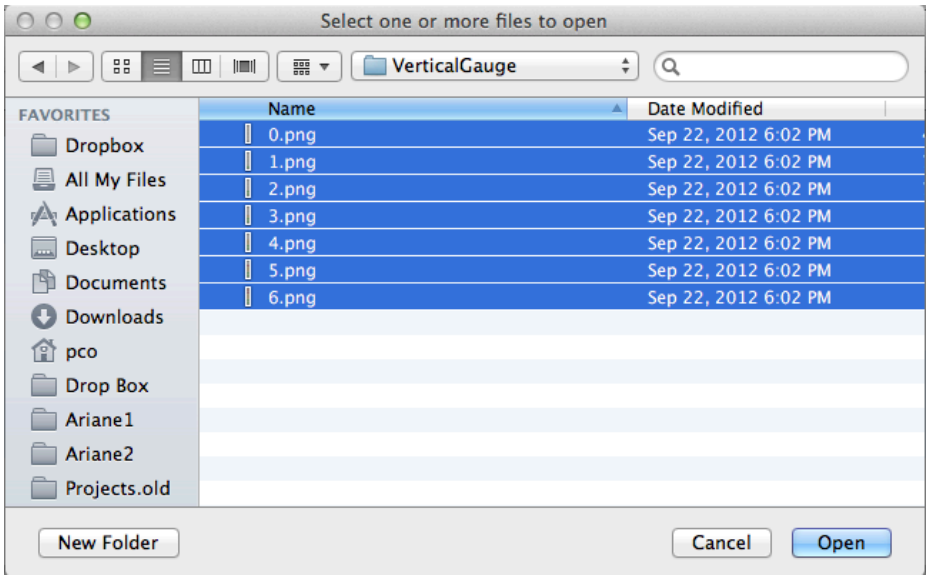
Note that you can also press or drag on a multi-icon button. The pressed position on the icon will be used to calculate the percentage, and that value will be send to the KNX device. So, if you press in the middle of the icon, your dimmer will be set to 50%.

9.2. Creating New Buttons.

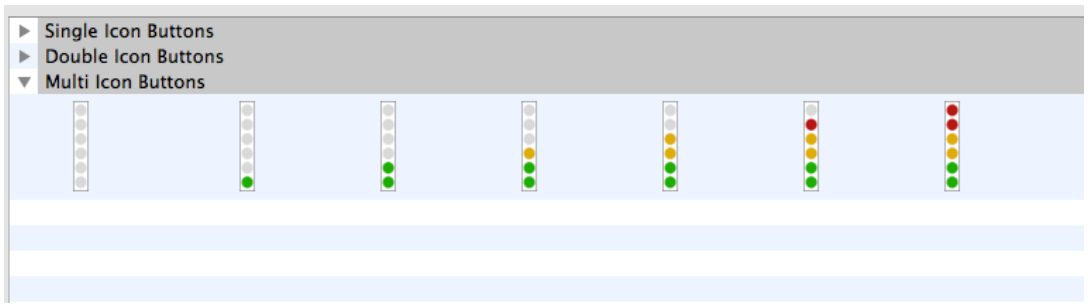
Adding new icons can be done using the '+' button in the right icon pool section. Select one or more images with the file browser. All supported image types are allowed.

If you select just one icon image in the file browser, it will be added to the icon pool (right part of the screen) and automatically be added in the Single Icon Buttons list (on the left)

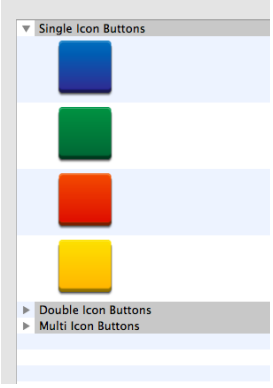
If you select more than one image in the file browser, you will be asked if you want the different icons to be used in one single multi-icon button, or if your selection should be added as multiple Single Icon Buttons.



Answering 'Yes' will create a new Multi-Icon button. You new button will be added to the Multi-icon button list on the left part of the screen.



Answering NO, will add all selected icon images as single icons.



9.3. Modifying Buttons.

You can modify any icons in the button list (on the left part of the screen) using DRAG and DROP.

You can:

- Drag one icon image from one button to another position in the same button (e.g. to switch the position of the on and the off icon)
- Drag one icon image from one button to another button (will remove the icon image from the drag starting button, and add the icon image to the drop position)
- Drag an icon image from the icon pool (right side) to any button (left side)
- Drag one icon image from one button to the icon pool (will remove this icon image from the button)

You will notice that if you add an extra icon to a double icon button, it will become a multi icon button, if you remove an icon from a double icon button, it will become a single icon button, …

9.4. Deleting Buttons.

You can only delete a button, by deleting all the icon images inside the button. You can delete an icon image by dragging the icons from the button and drop it in the icon pool, or select them and press the '-' button in the bottom left section.

You can also delete icon images from the icon pool, by selecting any icon, and press the '-' button in the bottom right section. Note that if that icon is used in a button on the left, it will only be removed from the pool, but still exist in the button.

9.5. Predefined Buttons.

When creating a new project, you will notice that a predefined set of icons and images is available. Don't change the given set of the multi icon weather button, or the wind direction button.

9.5.1. Weather

If you want to create or use your own set of weather icons, remember to use the following order. (from left to right, you need exactly 19 icons):

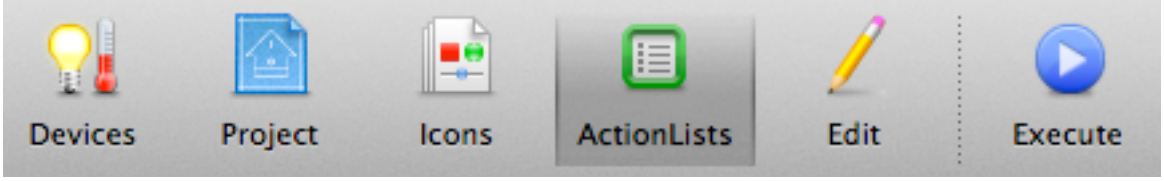
Icon 1 : Not Available (used e.g. if no connection to the weather site)
Icon 2 : Clear/Sunny
Icon 3: Partly Cloudy
Icon 4: Cloudy
Icon 5: Overcast
Icon 6: Mist / Fog / Freezing fog
Icon 7: Patchy rain nearby
Icon 8: Patchy snow / light snow / sleet showers
Icon 9: Patchy sleet / freezing drizzle / freezing rain
Icon 10: Thundery outbreaks
Icon 11: Blowing snow
Icon 12: Blizzard / heavy snow
Icon 13: Patchy light drizzle / light rain shower
Icon 14: Light drizzle
Icon 15: Light Rain
Icon 16: Moderate / heavy rain at times / heavy rain shower
Icon 17: Heavy rain / torrential rain
Icon 18: Moderate or heavy rain with thunder
Icon 19: Moderate or heavy snow with thunder

9.5.2. Wind Direction:

Icon 1: North
Icon 2: North-East
Icon 3: East
...
Icon 8: North-West

10. Create your Action Lists

Go to the 'ActionLists 'section.



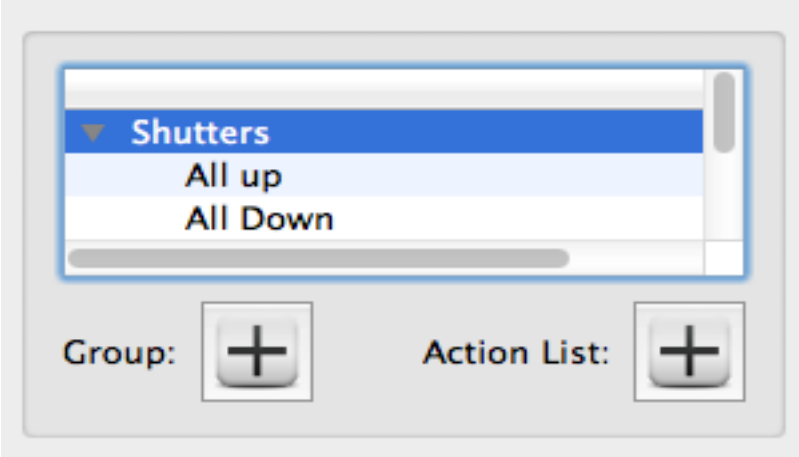
Action lists are sequences of actions, also known as 'Presets' or 'Scenes'. They allow you to execute more than one action when pressing a button.
Action lists are also used to send a specific value to a device (e.g. IR device), or to increase or decrease the current value of a device (e.g. temperature). See examples in Chapter 15.

10.1. Add a new group

Action lists are divided in action list groups. Start by creating one or more groups with the group '+' button, and give them a meaningful name.

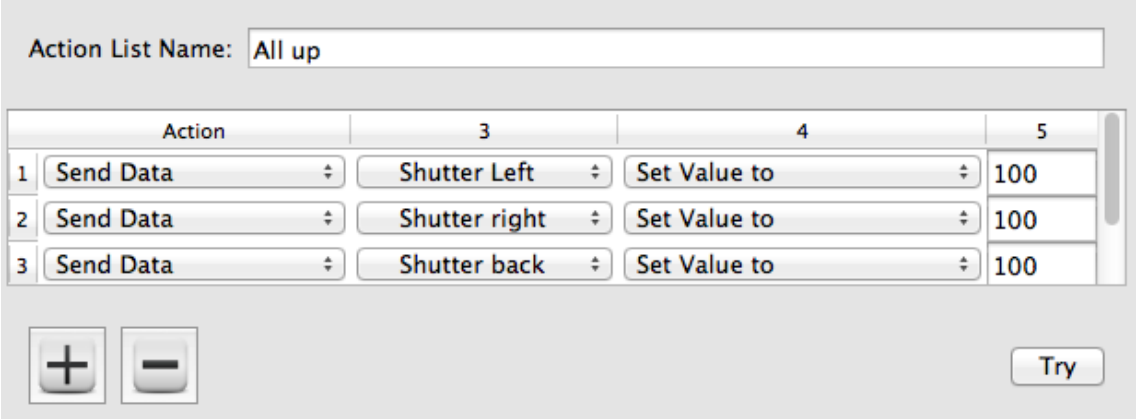
10.2. Add a new action list

Select one of your created groups and press the Action List '+' button to add a new action list in this group. Give it a meaningful name.



10.3. Add actions in your action list

Select the action list in your left action list window. You can now add actions to this action list in the right action list window, by pressing the '+' button in the right window section.

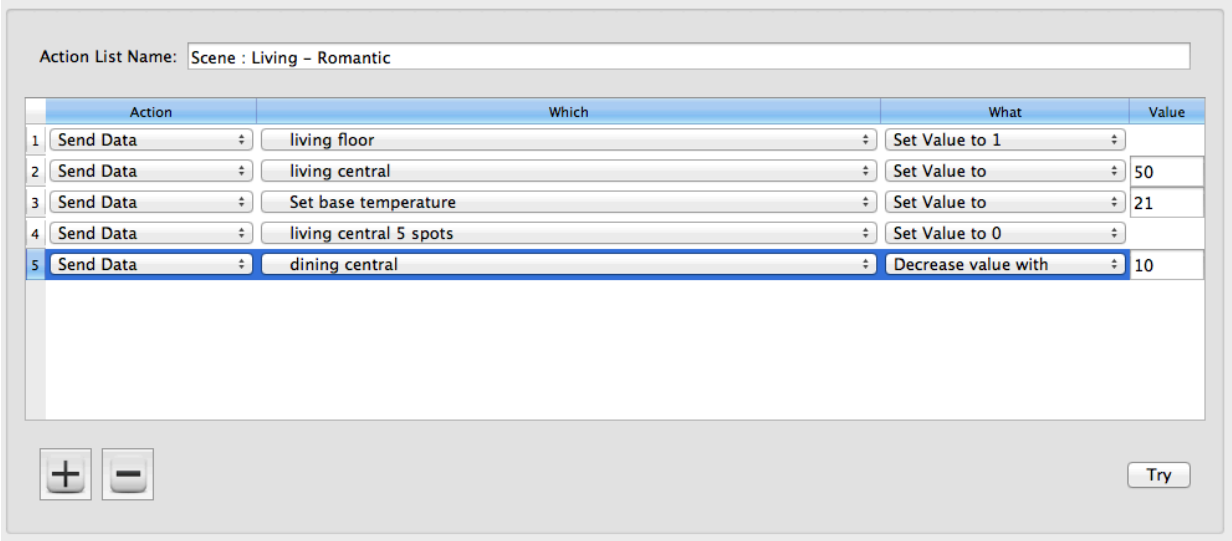

Action List Name: All up
Action
3
4
5
1 Send Data Shutter Left Set Value to 100
2 Send Data Shutter right Set Value to 100
3 Send Data Shutter back Set Value to 100
Try

You have the choice between the following types of actions:

10.3.1. Send Data

Send a message to a specific KNX device.
If you choose this Action, the next (2nd) column will automatically list the available devices. In order to appear in this popup list, your devices must have a valid type (not 'unknown' , see the 'Devices' section).

The different types of devices, 'what' can you define:


Action List Name: Scene : Living – Romantic
Action
Which
What
Value
1 Send Data living floor Set Value to 1
2 Send Data living central Set Value to 50
3 Send Data Set base temperature Set Value to 21
4 Send Data living central 5 spots Set Value to 0
5 Send Data dining central Decrease value with 10
Try

10.3.1.1. ON/OFF devices : you have the choice between:

- Toggle value (if ON, send OFF / if OFF, send ON)
- Set Value to 1 (ON)
- Set Value to 0 (OFF)

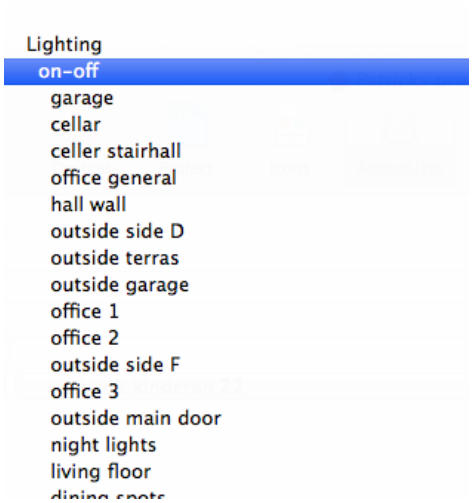
10.3.1.2. Value/percentage devices : you have the choice between:

- Set Value to .. (For percentages : 0 – 100, for values : 0 – 255)
- Increase value with .. (example : 15)
- Decrease value with ..

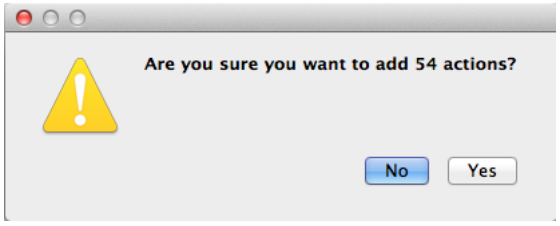
10.3.1.3. Temperatures:

- Set Value to .. (A temperature in degrees Celsius)
- Increase value with .. (example 0.1)
- Decrease value with ..

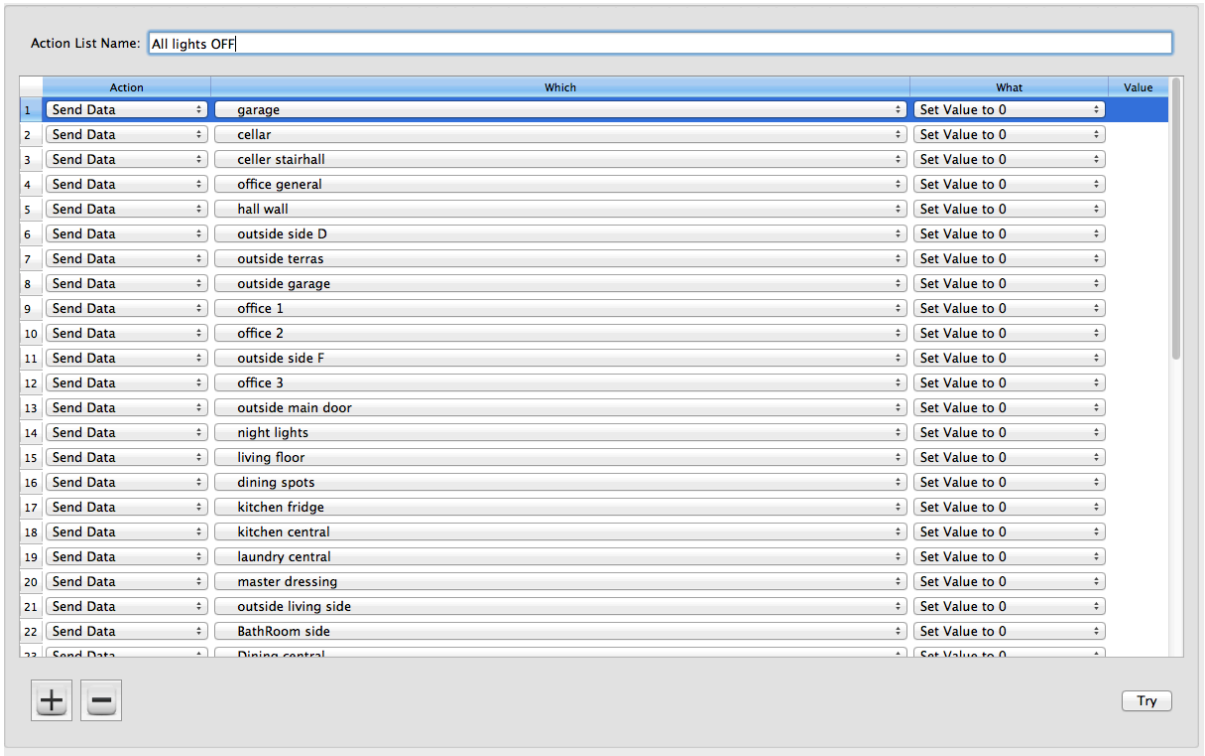
If you want to add all devices from one group or one subgroup automatically to your action list, select the group/subgroup in the popup list.



The Editor will ask you to confirm if you want to add all the devices it contains.

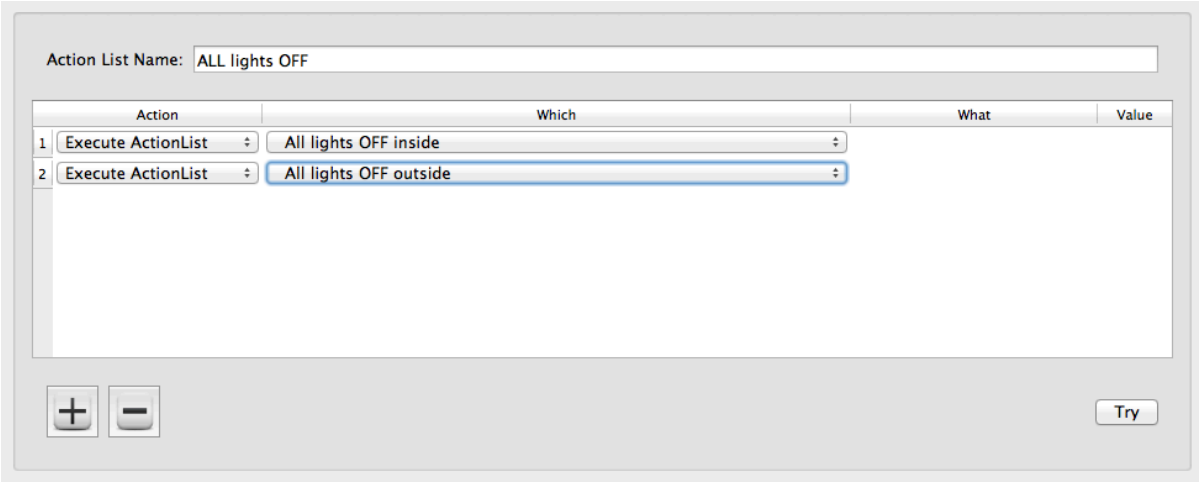


and the result will be:


Action List Name: All lights OFF
Action
Which
What
Value
1 Send Data garage Set Value to 0
2 Send Data cellar Set Value to 0
3 Send Data celler stairhall Set Value to 0
4 Send Data office general Set Value to 0
5 Send Data hall wall Set Value to 0
6 Send Data outside side D Set Value to 0
7 Send Data outside terras Set Value to 0
8 Send Data outside garage Set Value to 0
9 Send Data office 1 Set Value to 0
10 Send Data office 2 Set Value to 0
11 Send Data outside side F Set Value to 0
12 Send Data office 3 Set Value to 0
13 Send Data outside main door Set Value to 0
14 Send Data night lights Set Value to 0
15 Send Data living floor Set Value to 0
16 Send Data dining spots Set Value to 0
17 Send Data kitchen fridge Set Value to 0
18 Send Data kitchen central Set Value to 0
19 Send Data laundry central Set Value to 0
20 Send Data master dressing Set Value to 0
21 Send Data outside living side Set Value to 0
22 Send Data BathRoom side Set Value to 0
Try

10.3.2. Execute Action List

In an action list, you can also execute other action lists. If e.g. you have an action list to switch off all your lights inside your house, and another action list to switch off all lights outside your house, you can create a new action list to switch off all your lights by executing those 2 actions lists. It will look like this:



10.3.3. Goto Page

One of the actions in an action list can also be a ‘go to page’ action. If you choose this action, the second column will give you the list of available pages.

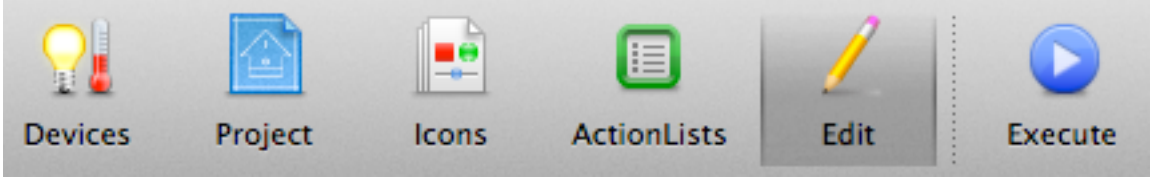
An example of this use case is pressing a button to switch on your TV. This action will switch on your TV, your sound amplifier, … and then goto a new page with your television buttons.

10.4. Try out your action list

If your KNX connection is active, you can immediately check your action list by clicking the ‘try’ button. Just make sure you are connected to the KNX network.

11. Step 7: Edit your project pages

Go to the 'Edit 'section.



In edit mode, you can create, edit and modify your pages in the project.

11.1. Shortcuts

The following shortcuts are available in editing mode:

- The **meta**-key on MacOSX is the **Cmd** key
- The **meta**-key on Windows is the **Ctrl** key

11.1.1. General shortcuts:

- meta-Y toggle technical / preview mode
- meta-A Select all objects on Page
- meta-D Deselect all selected objects
- meta-3 hide the selected objects
- meta-4 unhide/show all objects
- meta-G Hide/show grid
- meta-S Save your project
- meta-Z Undo last change
- meta–shift-Z Redo last undo
- meta-C, Copy Selected objects
- meta-X Cut selected objects
- meta-V Paste
- meta N Hide/Show KNX addresses

11.1.2. In text edit tool

- meta-A Select the complete text
- meta-D Deselect all text
- meta-C, Copy Selected text
- meta-X Cut selected text
- meta-V Paste text

11.1.3. in Path edit tool

- meta-A Select all the path points

11.2. Contextual menu

Right click inside selected object to get extra options: Hide selection, Move selection back and forward.

11.3. Object Types

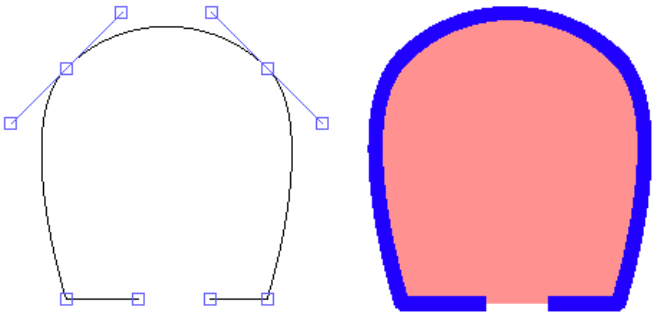
We have 6 different types of objects we can place on the project pages:

11.3.1. Graphic Objects

A graphic object is a path, which can contain:

- a fill color
- a border size
- a border color
- lines
- curves
- holes

Example:



11.3.2. Text objects

There are 2 types of text objects:

- Static text : Contains text that you define and that does not change.
- Dynamic text : a text object can be linked to a device value (e.g. dimmer percentage) or system parameter (e.g. the current time). When the device value or a parameter changes, the text is also updated.

Every text can be either a line text (the size of its box is equal to the size of the text), or a rectangle text (you define the size of the rectangle around the text). See 'The text tool' for more information.

A text object can have :

- a text color
- a background color
- a border
- a border color
- a font
- a font size
- an alignment
- a formatting (only for dynamic texts : percentage, temperature, date, …)

11.3.3. Image Objects

An image object can contain any of the following picture types: BMP, GIF, ICO, JPEG, JPG, PBM, PGM, PNG, PPM, TIF, TIFF, XBM, XPM. You can insert any image present on you computer into your project. (see 'image tool' for more details)

11.3.4. Camera Objects

A camera object is similar to an image object, except that instead of a fixed image, you define an URL to a WEB camera. We support most IP cameras that generate JPEG images. (see 'camera tool' for more details)

11.3.5. Button Objects

Button objects are also similar to image objects, except that they can be dynamic, and that they can execute an action when pressing or clicking on them.

We have 3 types of buttons:

- **Single icon buttons** (static button, has only one icon image)
- **Double Icon buttons** (on-off buttons, used for on-off switches. They contain 2 images: one will be shown when the value is 0, the other picture will be shown if the value is 1)
- **Multi Icon Buttons** (used for dimmers, weather type, …)

Note that a button can be hidden by another object (e.g. an image or a graphic object), but will still be active and will execute the action assigned to it when pressing or clicking inside the button rectangle (even if the button is hidden/not visible).
If different buttons are on top of each other, the topmost button will have priority.

11.3.6. Group Objects

You can put any combination of the previous objects into a group. Grouped objects will always be selected together. In many situations, this will make editing (align, transform, duplicate, …) more easy.

11.4. The Edit Menu

11.4.1. Undo/redo (meta-Z/meta-shift-Z)

Every object creation or editing operation is undo-able.

11.4.2. Copy/cut/paste (meta-C/meta-X/meta-V)

Will copy/cut the selected objects. If cut objects are pasted on the same page, a small displacements will be added to the objects, If pasted on a different page, the original object position will be kept.
When editing text in the text edit tool , the copy/cut/paste functions will only apply to text.

11.4.3. Arrange

In the following explanations, a group is seen as a single object.

11.4.3.1. Bring to front

The selected objects will be moved to the front of the current page. After executing this function, all other objects will lay behind these selected objects,

11.4.3.2. Bring forward

The selected objects will move one level to the front.

11.4.3.3. Send backward

The selected objects will move one level to the back.

11.4.3.4. Send to back

The selected objects will be moved to the back of the current page. After executing this function, all other (not selected) objects will lay above these selected objects,

11.4.3.5. Align left edges

The selected objects will be moved to the left. All left edges of the selected objects will be aligned to the most left selected object.

11.4.3.6. Align top edges

The selected objects will be moved up. All top edges of the selected objects will be aligned to the topmost selected object.

11.4.3.7. Align right edges

The selected objects will be moved to the right. All right edges of the selected objects will be aligned to the most right selected object.

11.4.3.8. Align bottom edges

The selected objects will be moved to the bottom. All bottom sides of the selected objects will be aligned to the bottommost selected object.

11.4.3.9. Align vertically

All selected objects will be centered vertically on the center of the bounding box of the selected objects.

11.4.3.10. Align horizontally

All selected objects will be centered vertically on the center of the bounding box of the selected objects.

11.4.4. Resize

11.4.4.1. Resize MinimalHeight

The vertical size of all selected objects will be changed to the height of the smallest selected object.

11.4.4.2. Resize MaximalHeight

The vertical size of all selected objects will be changed to the height of the largest selected object.

11.4.4.3. Resize MinimalWidth

The horizontal size of all selected objects will be changed to the width of the smallest selected object.

11.4.4.4. Resize MaximalWidth

The horizontal size of all selected objects will be changed to the width of the largest selected object.

11.4.4.5. Resize MinimalSize

The size of all selected objects will be changed to the size of the smallest selected object.

11.4.4.6. Resize MaximalSize

The size of all selected objects will be changed to the size of the largest selected object.

11.4.5. Group

The selected objects will be put into a group object. A group can contain any type of objects, including other groups. Area select (see select tool) of a group will always select all the objects in the group.

11.4.6. Ungroup

Remove all the groups in the selected objects. The objects inside the groups will become normal objects again.

11.4.7. Select/Deselect All (mata-A/meta-shift-A)

All objects on the current page will be selected/deselected.
If the text tool is active, the select all function will select/deselect the complete text in the text object you are editing.
If the path Tool is active, the select all function will select/deselect all the path points of the path you are editing.

11.5. The View Menu

11.5.1. Technical-Preview (meta-Y)

You can choose between colored mode, or technical mode. The technical mode shows only the bounding boxes of the objects. In many cases, the technical mode is a better choice for positioning and selecting objects.

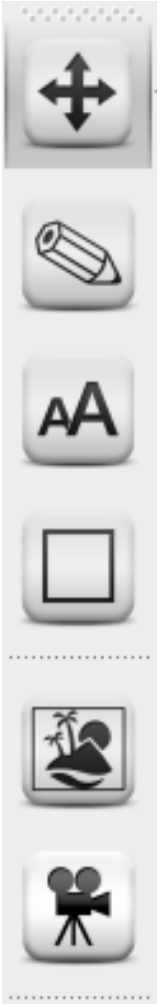
11.5.2. Show/hide grid (meta-G)

Will show or hide the grid.
The grid size and color can be set in the preferences.
Showing the grid means the grid is activated. When the grid is activated, moving or creating objects will follow the grid points. Use the technical preview and the transform tool with the activated grid to position or align different objects. In the transform tool, you can also use the arrow keys to snap the selected objects to the grid points.

11.5.3. Show/hide KNX addresses (meta-N)

This option has 3 states :
Activating this option will show the KNX address of the button objects and dynamic text objects, if an address has been assigned to it.
If activated again, it will show the KNX address description. This mode will also show the names of the action lists or system actions which have been assigned to button or text objects.

11.6. The Tools:



Select /Transform Tool : Click on an edge, or inside an object, or drag a rectangle to select one or more objects.

Path Creation/editing : DoubleClick on a path to start editing this path. Click anywhere else to start drawing a new path. Double-click to end the creation/editing.

Text Tool : Click or drag a rectangle to start a new text object. Click on any existing text to edit this text.

Shapes Creation: Creates rectangles, triangles, circles, … Click and drag to create objects. Press 'R' while dragging to change the shape.

Image Tool: Click or drag a rectangle to Place a picture. A browser will appear to select your picture on disk. See Page 2 for supported image formats.

Camera Tool: Click or drag a rectangle to Place a Camera Object.

11.6.1. The Select And Transform tool

11.6.1.1. Selecting objects

You can select objects in 3 different ways:

1: **Point select**. Click on the edge of the object to select it. It is easy to see the edge of the objects in technical preview.

2: **Rectangle select** : click and drag a rectangle around the objects you want to select. All objects lying entirely inside the selection rectangle will be selected.

3: **Area select** : If you click inside an object, this object will be selected. If more than one object is present at that position, the topmost object will have priority.

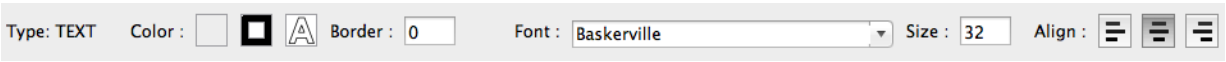
Notes:

- Clicking outside the project page will deselect all objects.
- Use 'Shift' to add more objects to the selection.
- Selected objects can be Moved (cursor inside object), scaled (cursor at sides or corners) or (cursor slightly outside corners) rotated. The cursor will show you what transformation is chosen. While transforming, use the 'Shift' key for proportional scaling or 15 degree rotations.
- Selecting an entire group (see 11.4.5) is only possible with the Area select.

11.6.1.2. Changing properties of the selected objects

Depending on the type of object, you can have different object parameters. Note that the object parameters are shown from the last selected object.

Text Parameters



Color:

Text rectangle background color
Text rectangle border color
Text color

Border:

Text rectangle border size in screen pixels

Font:

Text Font name. Note that not all fonts from your system are available in the HomeSoft Viewer! If you are creating a project for an iOS device, please check the following website for the list of available fonts:

http://www.iosfonts.com

and only use the fonts that are available on the iOS version of your iOS device. If the font is not found, an alternative font will be used, resulting in misaligned text objects.

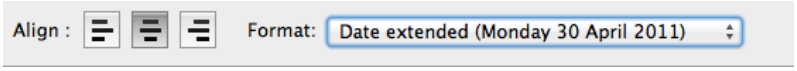
Font Size:

The size of your text in points.

Align

The alignment of your text object. If you created your text with a text rectangle (by dragging when creating the text object) , the text will be aligned inside the rectangle. If you created your text by clicking (line text), the click position will define the left, center or right position.

Format (for dynamic texts only)



If your text object is a dynamic text, which means it is linked to a KNX device, or to a system parameter like date and time, you will be able to select the formatting of the text:

For Temperatures:

- ˚C (21)
- ˚C (21˚)
- ˚C (21˚C)
- ˚C (21.3)
- ˚C (21.3˚)
- ˚C (21.3˚C)
- ˚F (78)
- ˚F (78˚)
- ˚F (78˚F)
- ˚F (78.3)
- ˚F (78.3˚)

- ˚F (78.3˚F)

For Percentages:

- Percent (98)
- Percent (98.4)
- Percent (98%)
- Percent (98.4%)

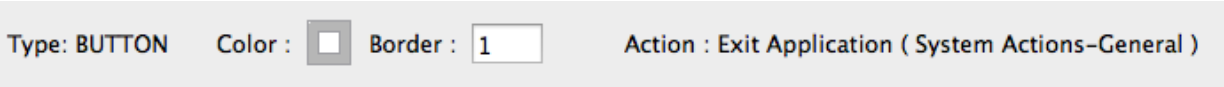
For Dates:

- Year (2011)
- Short Year (11)
- Month (04)
- Month (April)
- Short Month (Apr)
- Day (30)
- WeekDay (Monday)
- Short Weekay (Mon)
- Day/Month (30/04)
- Month/Day (04/30)
- Date US (2011/04/30)
- Short Date US (11/04/30)
- Date EU (30/04/2011)
- Short Date EU (30/04/11)
- Date (April 30)
- Short Date (Apr 30)
- Date (30 April)
- Short Date (30 Apr)
- Full Date (30 April 2011)
- Short Full Date (30 Apr 11)
- Date extended (Monday 30 April 2011)
- Short Date Extended (Mon 30 Apr 11)

For Time:

- Hour (23)
- Hour (11 PM)
- Minutes (56)
- Time EU (23:56)
- Time US (11:56 PM)

Button Parameters



Color:

Text button border color

Border:

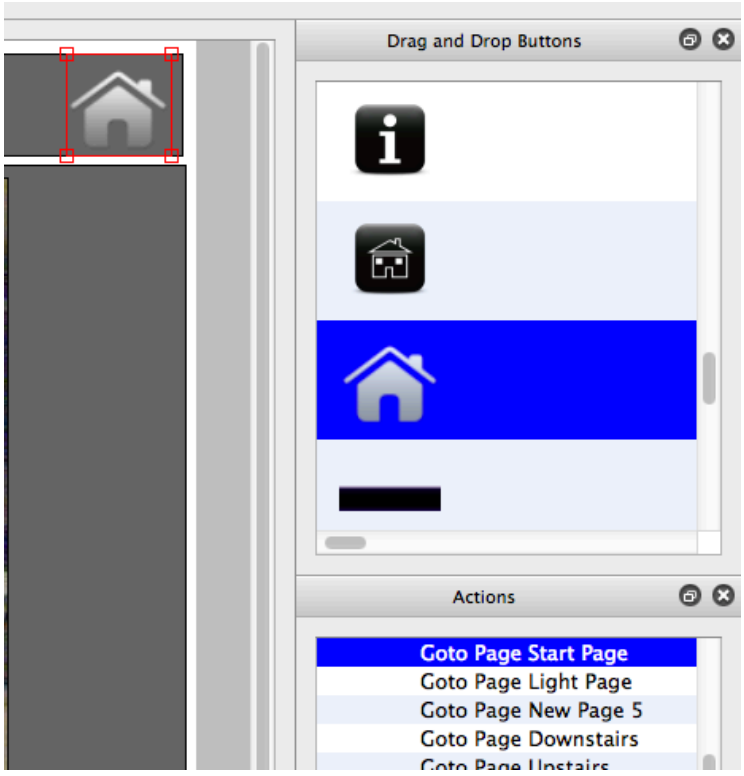
Button border size in screen pixels

Button icons:

When selecting a button , your button icon will also be selected on the top right side button list of your edit window.

Button Action:

When selecting a button , your button action will also be selected on the bottom right side of your edit window.



Graphic Object Parameters

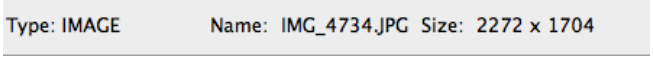
Color:

The object Fill color
The Object Border color

Border:

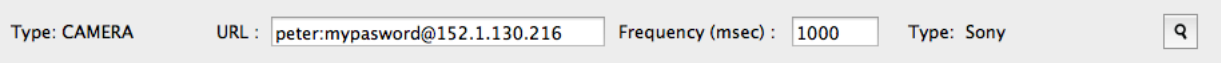
Object border size in screen pixels

Image Object Parameters



You can not change the parameters for Image object. It will just give you information about the original name of the image file, and the size in pixels.

Camera Object Parameters



URL :

Enter the URL of your camera. It can be an IP address, or a dns name. There is also support for the login and password if your camera is password protected. See chapter 11.9 for more details.

Frequency:

Defines the number of milliseconds before a new camera image will be fetched. For cameras inside your local network, you can easily set this value to 100ms (= 10 frames/second) for a smooth animation.

11.6.1.3. Transforming objects

When an object is selected, and you are in the select/transform tool, a selection rectangle will be drawn around the selection.

When moving your cursor at the corners of the selection, or move to the edge of the rectangle, you can:

- Move the object (cursor inside object, cursor is cross)
- Scale the object (cursor on corner or on edge , cursor is double arrow)
- Rotate the object (cursor slightly outside a corner, cursor is rotation arrow)

While transforming an object, you can have additional functions using modifier keys (you can use more than one at the same time):

For moving operations, use:

Shift-key for horizontal or vertical moves
Alt-key to keep the original object

For scaling operations, use:

Shift-key while scaling for proportional (= equal vertical and horizontal) scaling.
Meta-key to change the scaling center to the center of the selection
Alt-key to keep the original object

For rotation operations, use:

Shift-key while scaling to use a constraint angle (set to 15 degrees)
Meta-key to change the rotation center to the center of the selection
Alt-key to keep the original object

11.6.2. The Path draw/edit tool

11.6.2.1. Editing an existing path

Double clicking on the edge of a object, will put that object in path editing mode. This will only work on graphic objects. Graphic objects are object which were created by either this path draw tool, or the shape creation tool.

The path is now in edit mode (blue), and the points are drawn as squares,
You can add any point to any path, by just clicking on a line (the cursor changes to a cross)

You can select points by:

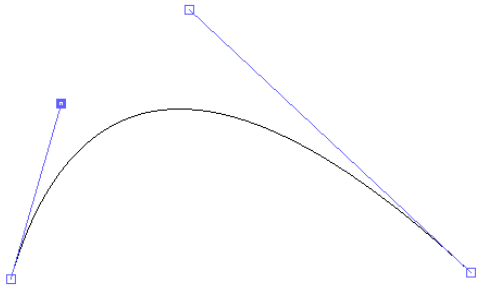
- Clicking on the point
- Drag a rectangle around one or more points
- Use the SHIFT key to add points to your selection.

Selected points can be:

- Moved (your cursor needs to be positioned on a selected point, the cursor will change to the move icon). Click and drag the selected points to a new position
- Moved with the arrow keys. If the grid is active (visible), your movements will use the grid distance (Defined in the edit preferences). If the grid is not active, the points will move by the number of pixels defined in the Arrow Movement in the Edit Preferences.
- Deleted. If only one point is selected, the point will be removed. If more than 1 point is selected, the lines between the 2 selected and points will be removed.

Splines:

Double clicking on a point will toggle the between lines and Splines. A spline is a curved path, and has 2 control points. Moving the control point will adapt the shape of the spline.



Click and dragging on an unselected point will move the point (and its control points if it's a spline)
Click and drag on an unselected control point, will modify the shape of the spline, by moving both control points in a symmetric way.
If you want to change the position of only one control point, select the control point first. Then click and drag on the selected control point.
All path editing actions can be undone (meta-z)

11.6.2.2. Draw a new path

Click on the project drawing page to define the points of the path you want to draw. A straight line will be drawn between the different clicked points.

If you want to draw splines, click and drag. The click will define the end point, dragging will define the control point.
If your last click is on the starting point, the path will automatically be closed and created.
You can end the path drawing by double-clicking anywhere in the drawing page.

You can cancel the path drawing any time by pressing the ESC key.
You can undo your last added point during drawing by pressing the undo shortcut (meta-z)

If the grid is active (activate/de-activate with meta-G), the points you draw will always snap to a grid point.

11.6.3. The Text tool

With the text tool you can:

11.6.3.1. Create a new line text

Click on any position on your project page to start a line text. Don't click too close to an existing text, or you will edit this existing text (see 3) A cursor will appear and you can start typing text.

11.6.3.2. Create a new rectangle text

Click and drag to create a rectangle text object. Don't click too close to an existing text, or you will edit this existing text (see 3) A cursor will appear and you can start typing text.

11.6.3.3. Edit existing text

Click close to an existing text object, to edit or change the text. Your cursor will appear in the existing text. You can now change your text as needed. Use the arrow keys to navigate through your text. You can also drag or use the shift-arrow keys select a range of characters.

11.6.3.4. Resize the text rectangle (for rectangle text)

Click inside an existing rectangle text to go into text edit. If it is a rectangle text, the border rectangle will be shown. When moving your mouse pointer close enough to the border rectangle, your cursor will change into an arrow , and you will be able to resize the border rectangle.

11.6.3.5. When editing a text object with the text tool you can **NOT** :

- Change the text alignment
- Change the font
- Change the size
- Change the colors
- …

You will need to switch to the select tool and select the text object if you want to change its parameters. (See section 11.6.1.2 : Changing properties of the selected objects)

11.6.4. The Shapes Tool

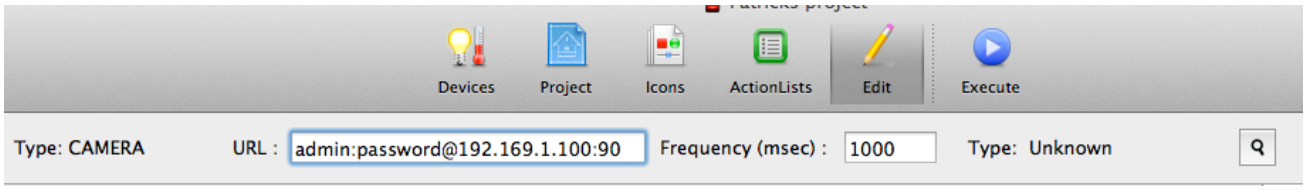
With the shapes tool, you can draw rectangles, ellipse, circles, triangles, …
Jus click and drag to create the object.

Press 'Shift' for proportional shapes.
Press 'R' while dragging to change the object Shape (rectangle, ellipse, polygon, …)

Note that if the grid is active, your shape will be positioned on grid points.

11.6.5. The Camera Tool

Click or draw a rectangle to place a camera object. You can always resize your camera object later with the transform tool.
A camera object will be created. A camera object has the following parameters:



URL:

Type in the IP-address or URL of your camera. If the post is not the default port (80), you can specify the port. If you want to access a camera from outside the local network, you can also enter the URL of the camera.

Examples:
192.168.1.100
192.168.1.100:8080
mycamera21.dyndns-home.com

If you are using a password protection for your camera, you can add the username and password in the URL field like this:

Username:password@192.168.1.100

Frequency:

This field will determine the refresh rate of the camera images. The default value is 1000 milliseconds (so, one image every second). For cameras in your local network, you can decrease the refresh rate to a minimum of 50 milliseconds (= 20 images per second).

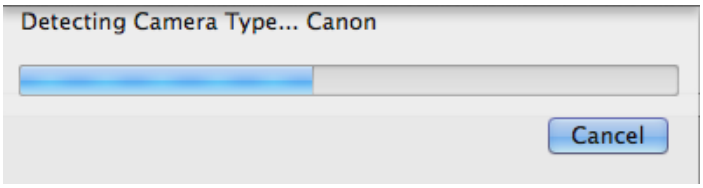
Type:

The HomeSoft Editor will automatically detect the correct camera type, if the camera type is in the default camera list which is provided with the Software.

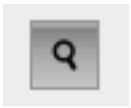
- We only support cameras using JPEG images.
- The following types of JPEG cameras are supported automatically:
  - Axis

- Mobotix
- D-link
- Canon
- Gradspot
- Linksys
- Panasonic
- Sony
- WebcamXP

When you enter the IP address or URL of a camera, the software will immediately try to recognize the camera type.



If the correct type was found, the camera type will shown. If no matching camera type was detected, the camera type will be set to UNKNOWN. You can always force a new automatic camera type detection by using the camera search button



If your camera was not detected, it probably means that the camera type is not defined in the default camera list we provide with the software. But you can add additional camera types to the default camera list. See Appendix 3 to add your own camera types

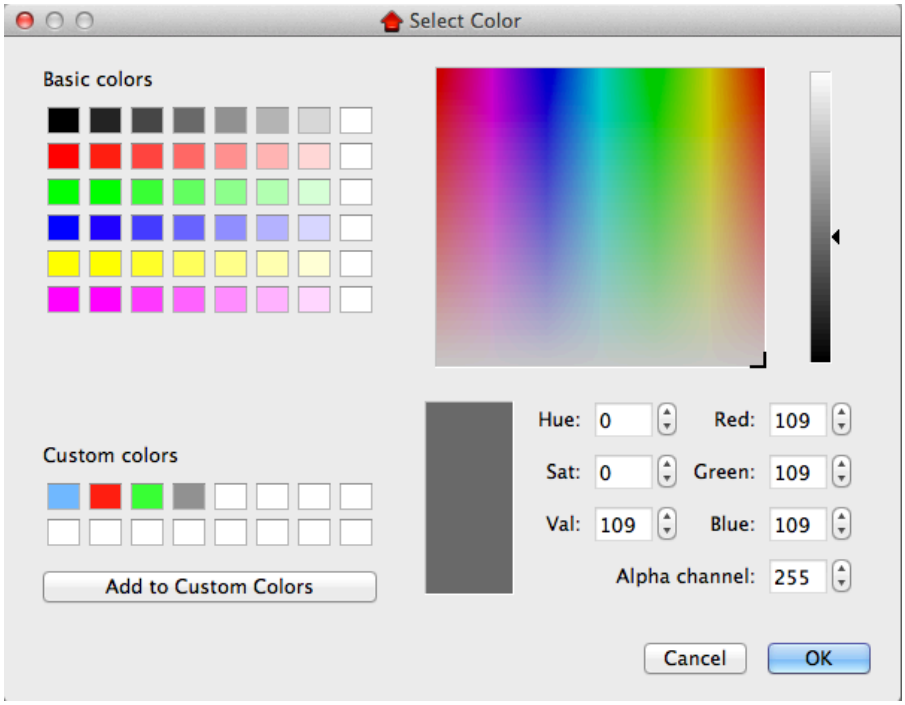
11.6.6. The Image Tool

Click or draw a rectangle to place an image. The file selector will open, and you can choose an image. The following image formats are supported:

- BMP (Bitmap image file)
- GIF (Graphic interchange format)
- ICO (Icon file format)
- JPEG (Joint Fotographic Experts Group)
- JPG (Joint Fotographic Experts Group)
- PBM (Portable bitmap format)
- PGM (Portable graymap)
- PNG (Portable network graphics)
- PPM (Portable pixmap)
- TIF (Tagged image file format)
- TIFF (Tagged image file format)
- XBM (X-Bitmap)
- XPM (X-Pixmap)

11.6.1. Coloring Objects

Most objects have a fill or a stroke color. Click on the color patch to open the color dialog.

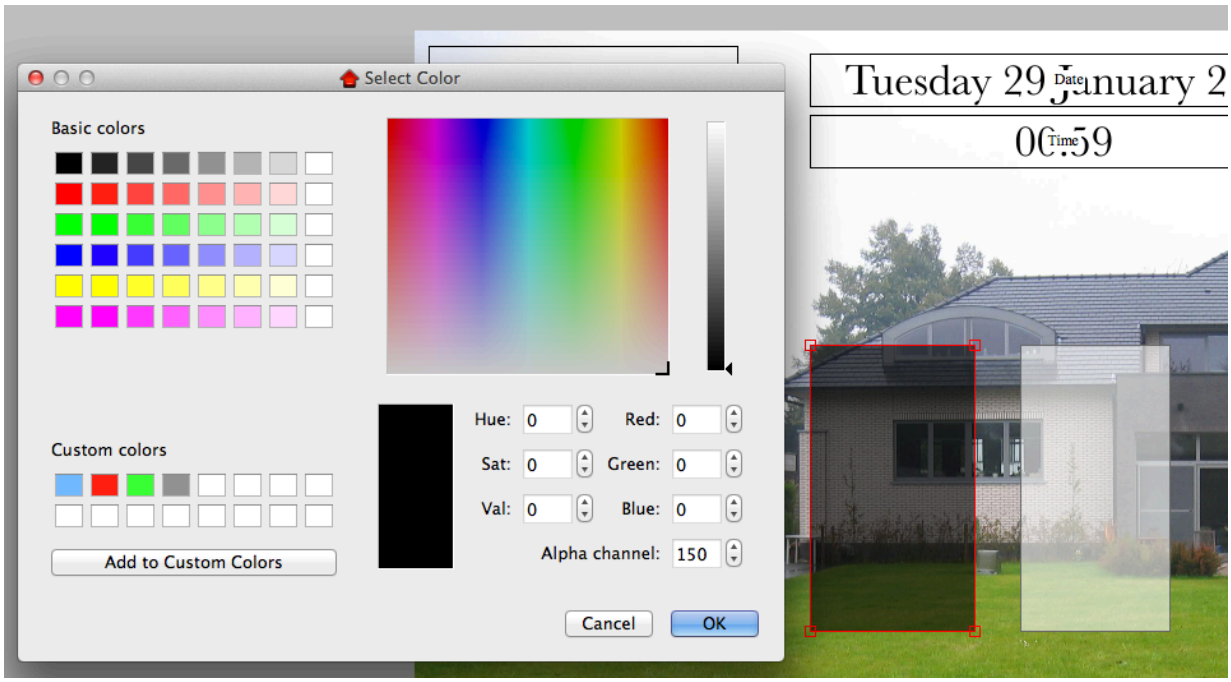


In the color dialog, you can set the color by picking a color in the color pool, or entering an RGB value manually.

Alpha channel

The alpha channel will define the transparency of your color. A value of 255 will define an opaque color, a value of 0 will be completely transparent.

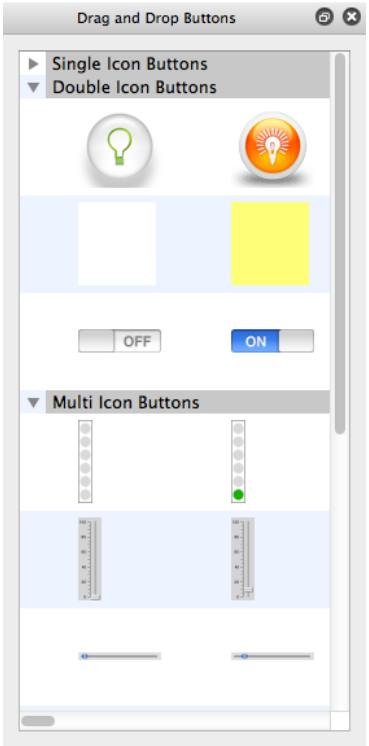
As an example, you we created a white or a black rectangle with transparency on an image background. The result will look as this:



Keep in mind that creating new object will always use the color of the last selected object. So, if you want to create a new object (shapes tool) with the same color as some other object, select the colored object first, switch to the shapes tool, and drag or create your new object.

When defining your color in the color dialog, and you pick a color in the color pool, or in the predefined color patches, DON'T FORGET TO CHECK YOUR TRANSPARENCY VALUE, because the Alpha channel value will be remembered from the previous color. For normal opaque colors, the value should be 255.

11.7. Drag and Drop Buttons



11.7.1. Placing new buttons

Buttons can be placed in your project by drag and drop from the right side list onto your project page.

Drag and drop buttons must be created separately in the Icons section. A new project will automatically contain some default buttons.

You can just drag and drop any button from the list onto your page.

When selecting a button object in your project, the correct drag and drop button will be highlighted.

You can change the buttons in your project, by just selecting them, and then double-clicking on any drag and drop button from the list. This will not modify any other selected (non button) objects.

11.7.2. Assigning an action to your buttons:

Select one or more buttons and double click on one of the 'Actions' in the bottom right list. In this list, next to single actions and your own action lists, you will also find system parameters (Date/Time, Weather) and System Actions (Goto Page, …)

I**mportant remark:** Only actions with a valid type (different from 'UNKNOWN') will appear in this list. (see paragraph 7.2)

Assigning an action to a text:

Select any text object, and double click on a single action in the Drag-and-Drop actions list. The text will now show the value of the assigned action. (e.g. the percentage of the dimmer, the wind speed, the temperature of some room, …)

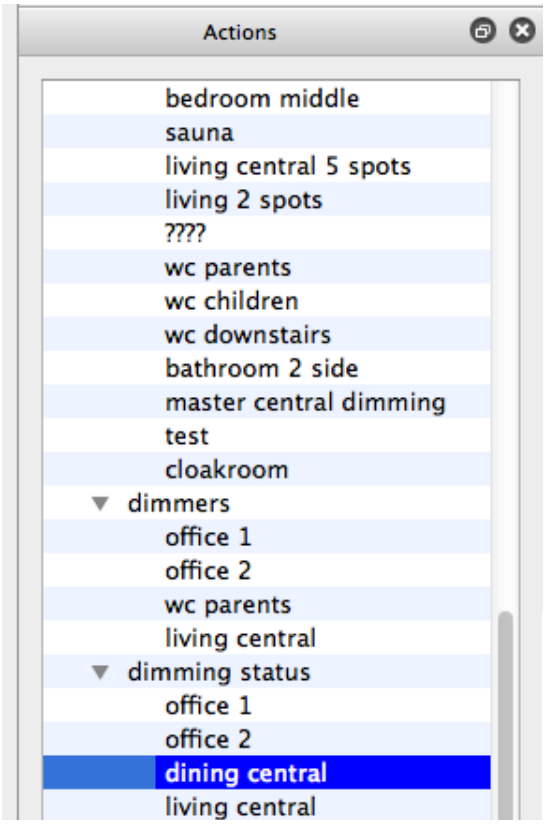
Drag-And-Drop of any single action from the list onto your project page, will automatically generate a default text object linked to this action.

11.7.3. Replacing an existing button object:

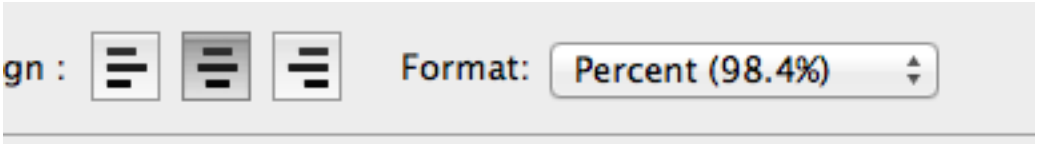
If one or more button object are selected, double clicking on a button in the 'Drag and Drop Buttons' list will replace the button icons of the selected object.
The size of the original button object will remain, and the new button will be resized to fit inside the object rectangle.

11.8. Drag and Drop Text

If you drag an action from the Actions list onto your page, a dynamic text object will be created, linked to the selected action:

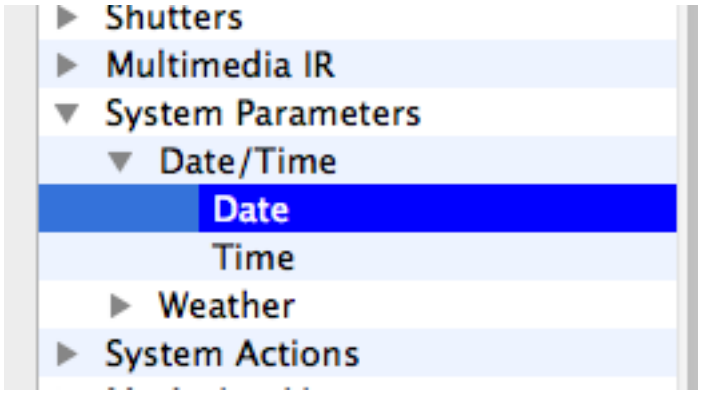


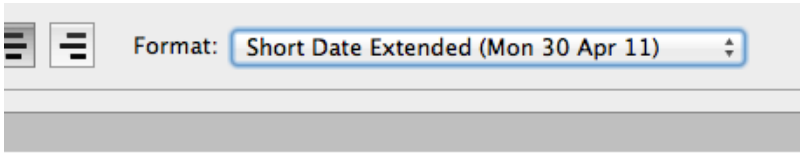
Depending on the type of object, you will be able to change the formatting of the text object:



Resulting in a automatic formatted number:

Drag and drop the time action from the system parameters to create a dynamic time object. Select the object and change the formatting to get the desired result:

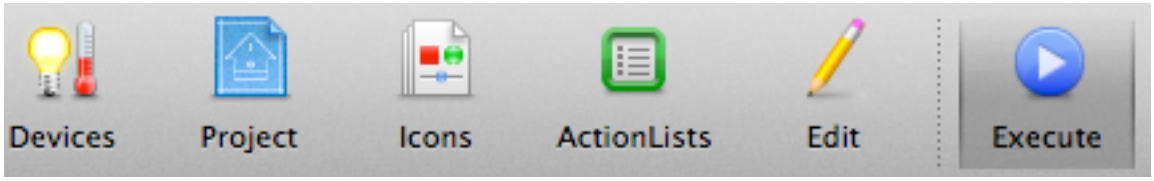




You can also create a dynamic text object, by generating a normal text object with the text creation tool first. Select the text object, and then double click on an action in the list to link the address to the text object, resulting in a dynamic text object.

12. Test (execute) your project

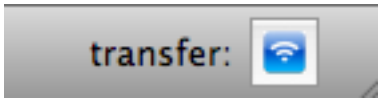
You can immediately test out your created project in the ‘Execute Mode.
Go to the ‘Execute ‘section.



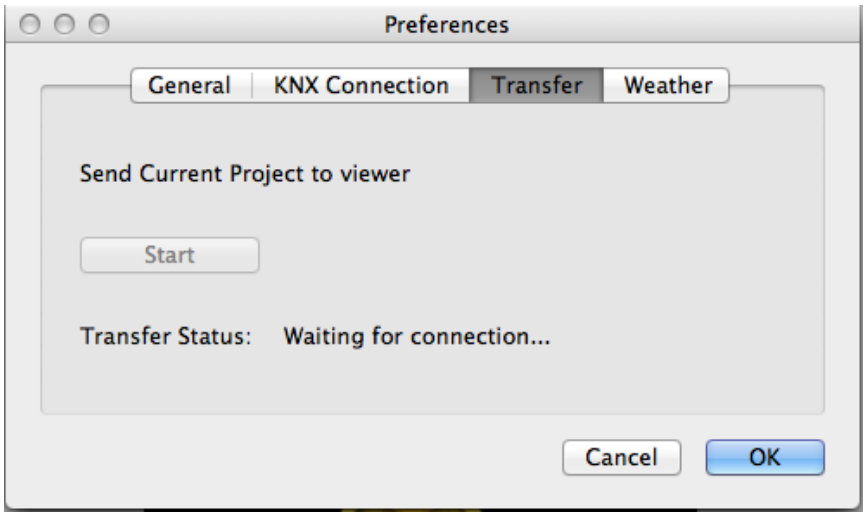
It is recommended that you have an active KNX-Connection, or you will not be able to execute any KNX actions.

13. Transfer your project to the Viewer

In the **HomesSoft Editor :** Go to the Transfer tab in the preferences, or click on the Transfer Icon in the bottom right of your screen:

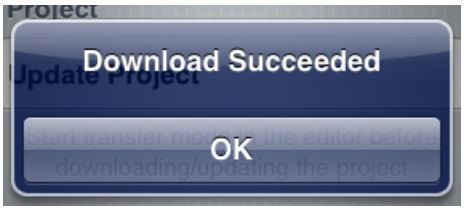


And press the Start Button.



In any **HomeSoft Viewer**: Go to the settings and Press the 'Download New Project'

Wait for the transfer to complete:



You can now start and run your project in your HomeSoft Viewer.
Make sure you have a connection with the KNX/IP module.

14. Appendix : Advanced Information

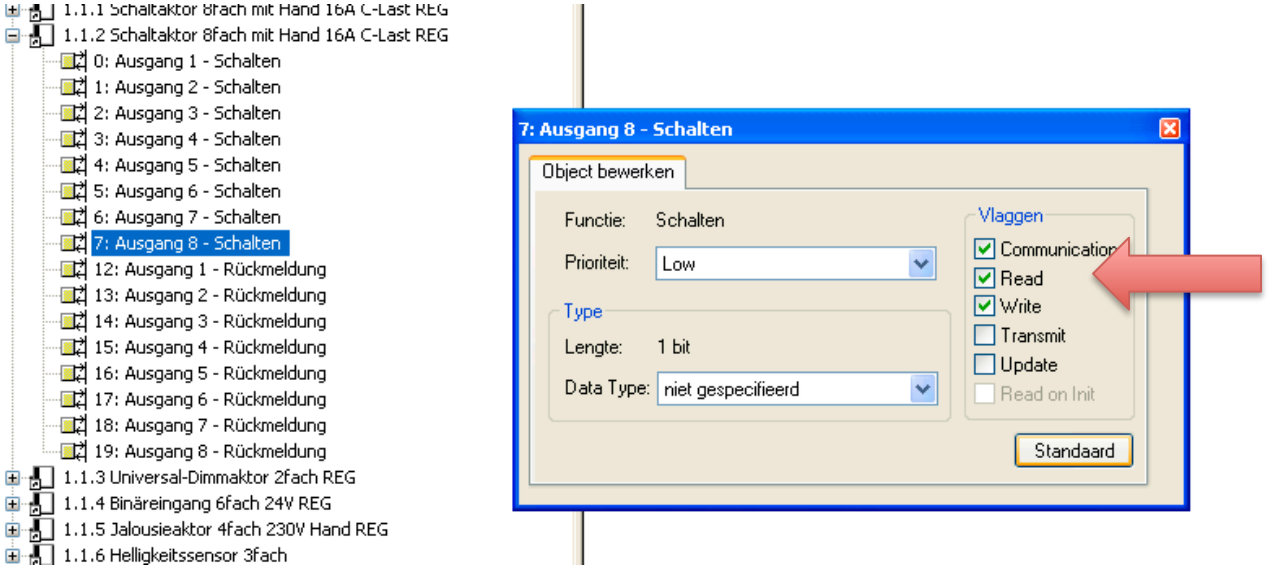
14.1. ETS Programming

When a project is started in the HomeSoft Viewer, or a connection is activated in the HomeSoft editor, the HomeSoft Software will request the current status of all used devices in your project.

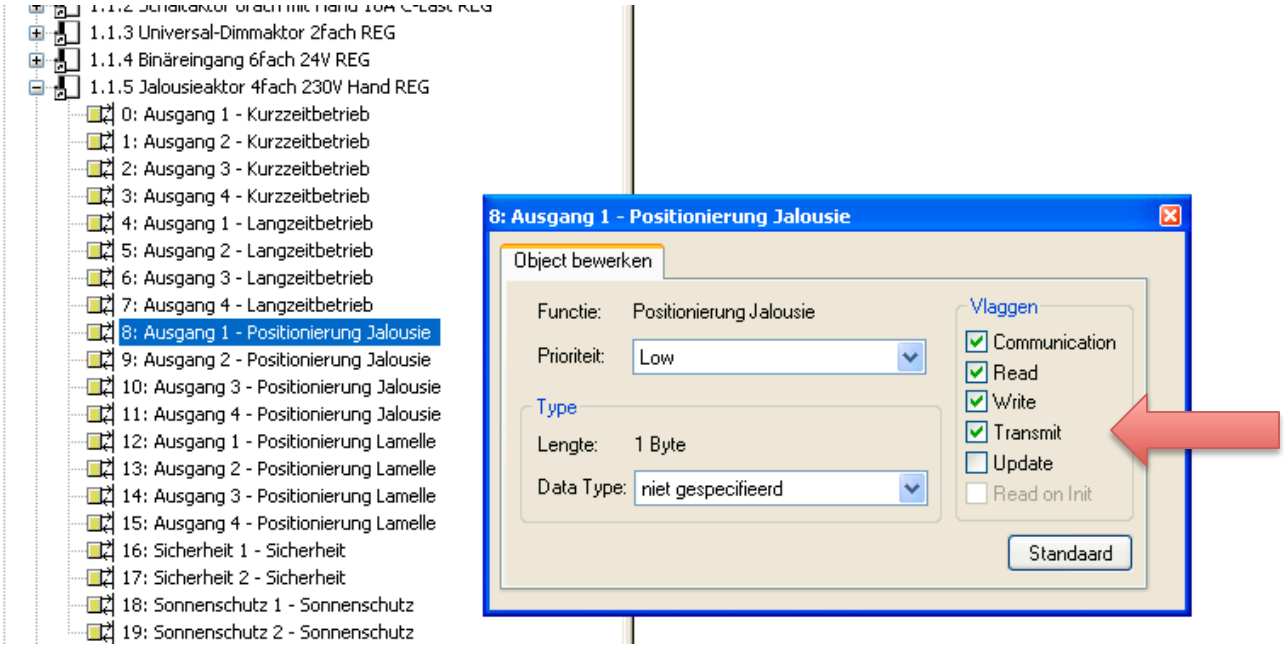
This is done by sending a DATA_REQ (data request) message to the KNX network, for every KNX device used in your project. If your KNX devices have been set-up in the correct way, these devices will return an answer, and the HomeSoft viewer will be able to show the correct status of your lights, dimmers, curtains, temperatures, …

In order for the KNX devices to give a response to this request, the READ flag must be set, This means that a request can READ the status of the device. If not, the device will not respond, and on startup, the HomeSoft viewer will show your lights as being OFF, your dimmers will have value 0, …

So please check, or ask your KNX installer, to configure your devices with the ETS software so the read flag ON. The best place to set the read flag, is on the KNX switching modules and the KNX dimming modules. For room temperatures, you will need to set the read flag in the temperature module for each room.



In certain situation, you will also need to activate the 'Transmit' flag. This is e.g. needed for shutter position. If you want the shutter device to transmit the new position of the shutter when the shutter was opened or closed, this flag must be set.


1.1.3 Universal-Dimmaktor 2fach REG
1.1.4 Binäreingang 6fach 24V REG
1.1.5 Jalousieaktor 4fach 230V Hand REG
0: Ausgang 1 - Kurzzeitbetrieb
1: Ausgang 2 - Kurzzeitbetrieb
2: Ausgang 3 - Kurzzeitbetrieb
3: Ausgang 4 - Kurzzeitbetrieb
4: Ausgang 1 - Langzeitbetrieb
5: Ausgang 2 - Langzeitbetrieb
6: Ausgang 3 - Langzeitbetrieb
7: Ausgang 4 - Langzeitbetrieb
8: Ausgang 1 - Positionierung Jalousie
9: Ausgang 2 - Positionierung Jalousie
10: Ausgang 3 - Positionierung Jalousie
11: Ausgang 4 - Positionierung Jalousie
12: Ausgang 1 - Positionierung Lamelle
13: Ausgang 2 - Positionierung Lamelle
14: Ausgang 3 - Positionierung Lamelle
15: Ausgang 4 - Positionierung Lamelle
16: Sicherheit 1 - Sicherheit
17: Sicherheit 2 - Sicherheit
18: Sonnenschutz 1 - Sonnenschutz
19: Sonnenschutz 2 - Sonnenschutz
8: Ausgang 1 - Positionierung Jalousie
Object bewerken
Functie: Positionierung Jalousie
Prioriteit: Low
Type
Lengte: 1 Byte
Data Type: niet gespecifieerd
Vlaggen
Communication
Read
Write
Transmit
Update
Read on Init
Standaard

14.2. IP Cameras

You can open the cameras.txt file in the 'File' menu.

- The default text editor of your system will be used to open the file.
- Be careful to keep the format of the file.
- Be sure you save your file in Plain Text Format
- After changing the camera list (adding new cameras, changing parameters) , you will need to RESTART the HomeSoft editor.

14.2.1. Adding your own camera type

If you camera is not listed in the default camera list, you can add your own camera type. This is how you add new camera types:

- Go to the website : www.ispyconnect.com/sources.aspx
- Look for your camera vendor in the camera database
- Look for your camera model in the list, and look for **JPEG** as Connection Type

Model Type Example URL

Hdm3	VLC	rtsp://IPADDRESS:554/mpeg4
HREP	JPEG	http://IPADDRESS**/cgi- bin/webra_fcgi.fcgi**?api=get_jpeg_raw&chno=[CHANNEL]

- Open the camera list in the 'File' menu.
- Add the following entry in the camera list (preferably on top of the list)

  YourCameraName:**/cgi- bin/webra_fcgi.fcgi**

  Note that you should only use the part between the IPADDRESS and the '?' character

- Save the Camera.txt file.
- Restart the HomeSoft Editor.
- Your camera type should now be detected when pressing the camera search button.

14.2.2. Changing the default camera parameters

It is also possible to change the default parameters of the camera image. Again, look up your camera type on the website : www.ispyconnect.com/sources.aspx

Example:

You have an Axis 211 camera, and you want to change the resolution and you also want the time and the date on your camera image. On the camera web page, you can find the following info:

http://IPADDRESS/axis-cgi/jpg/image.cgi?date=1&clock=1&resolution=[WIDTH]x[HEIGHT]

- Open the HomeSoft camera.txt file in the 'File' menu
- Change the entry:

Axis:/axis-cgi/jpg/image.cgi

By:

Axis:/axis-cgi/jpg/image.cgi?date=1&clock=1&resolution=320x240

- And put this line on top of the list.
- Restart the HomeSoft Editor
- Your new camera parameters should now be detected and used when pressing the camera search button.

14.3. Translations

When Using Time and date in your projects, and the formatting of the date is using the weekname or the mont name, the default language is set to english. If you want your monts or weekdays displayed in your own language, you can do this by editing the Days.txt and Months.txt file.
You can open these files in the 'File' menu.

- The default text editor of your system will be used to open the file.
- Be careful to keep the format of the file.
- Be sure you save your file in Plain Text Format

Days.txt:

- The Days.txt file should contain 7 lines.
- Every line contains the full Weekday name, a space character, and the short weekday name.
- Example: if you want French names, your file should become:

  Dimanche Dim
  Lundi Lun
  Mardi Mar
  Mercredi Mer
  Jeudi Jeu
  Vendredi Ven
  Samedi Sam

Months.txt

- The months.txt file should contain 12 lines
- Every line contains the full month name, a space character and the short month name
- Example: if you want Italian names, your file should become:

  Gennaio Gen
  Febbraio Feb
  Marcia Mar
  …

14.4. Remote Connection

You want to control your hoe devices over the internet, while you are on a different location? This is possible, and there are 2 methods to do so. You can either use the NAT (Network address translation) available in your home router, or you can use VPN (if you have a VPN server). Note that using VPN is the most secure option.

Using NAT:

14.4.1. What do you need?

You need either a STATIC IP address, or a dynamic dns service (www.dyndns.com, www.no-ip.com, …)

14.4.2. Which ports are used

- The KNX/IP device is using UDP and port 3671.
- The IP cameras are usually using TCP and port 80

14.4.3. Define the port remapping

You will need to set-up your router to be able to access your internal IP devices from the outside world. This is done using NAT (network Address Translation) .

Go to the setup of your router. How to do this, is dependent from the connected router model.
You can get this information from the user manual that is provided with your router.

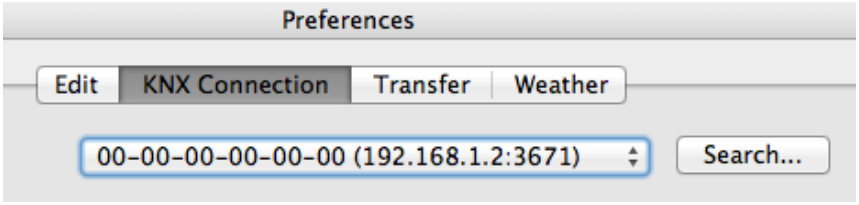
Some examples:

- In most cases, you can access the router setup and configuration by typing the IP address: 192.168.1.1 in your web browser.
- If your router is a Apple Time Capsule, you access the router configuration using the AirPort Utility in the Applications Utilities.

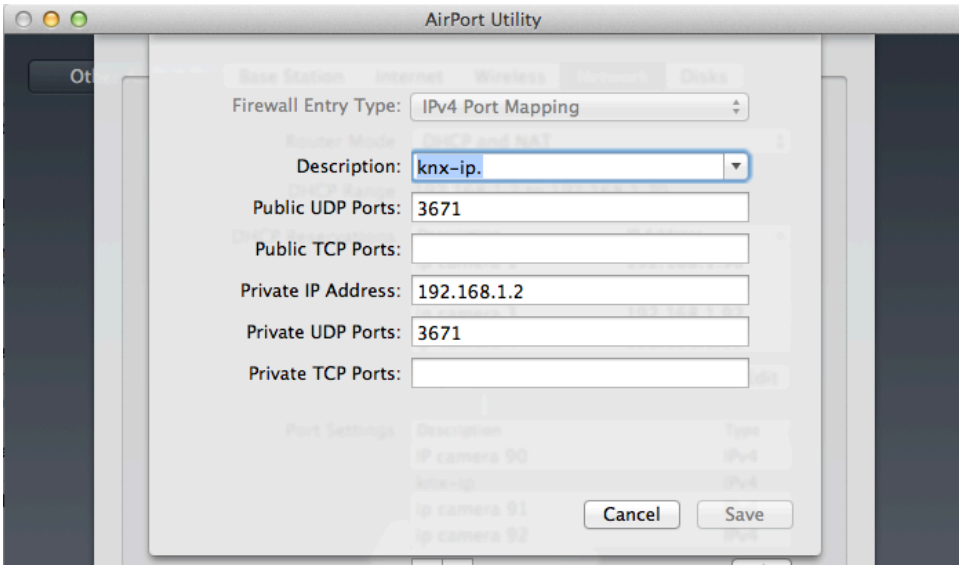
In your router configuration page, try to find the NAT section, and look how you can add new Port Mappings.

Setting the KNX/IP module Port mapping

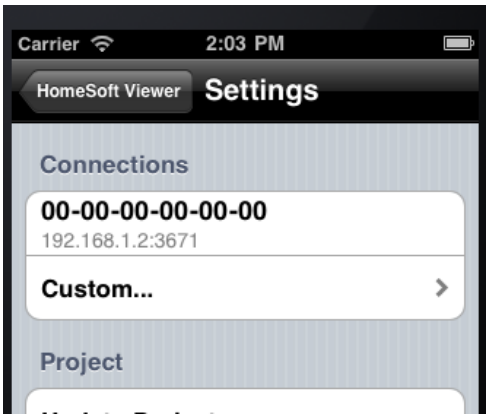
To remap your KNX/IP module, you should know the internal IP address. You can find this address in the HomeSoft Editor Preferences – KNX Connection.



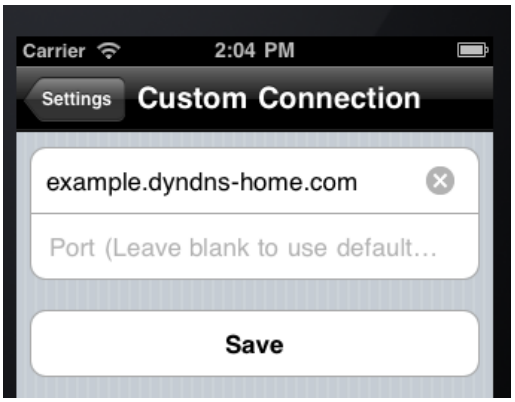
Fill in this address in the Private Address section, and fill in the port : 3671 in both the Public and the Private UDP Port section. Note that the public UDP port can be set to any value. If you do so, make sure to fill in this modified port number in the Custom connection settings (see further).



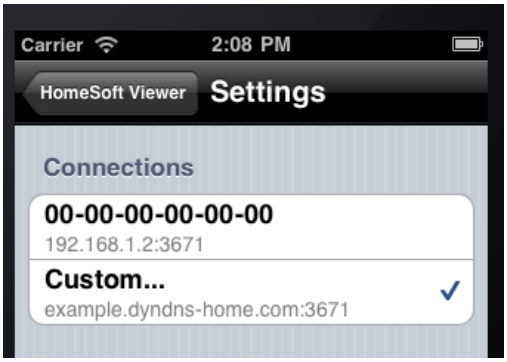
In the HomeSoft Viewer, go to the 'Settings. And choose the 'Custom' connection.



In the Custom connection section, fill in your DNS name our your static IP address, and press the 'Save' button.



The Viewer is now ready to access your KNX Network through the Internet.

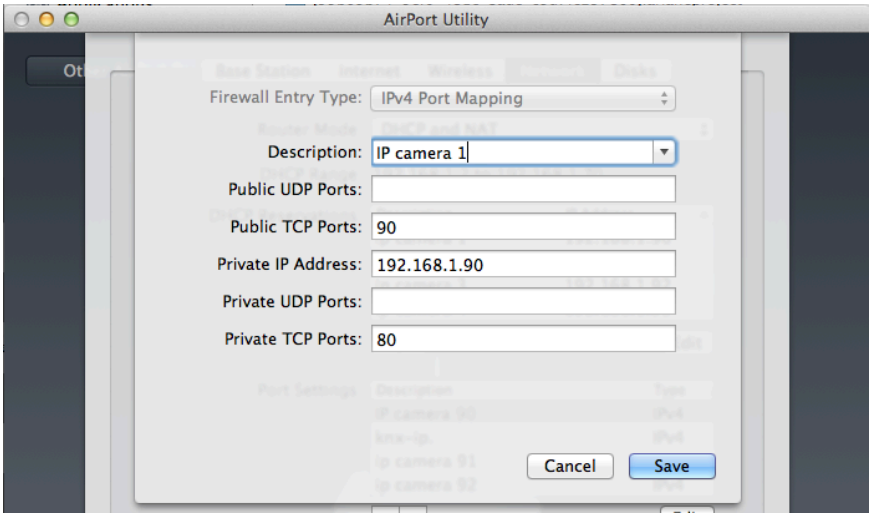


Setting the camera port mapping

If you are using NAT, you also need to remap your cameras. The procedure for cameras is almost identical. You need to know the internal IP address of your camera(s). The internal port of a camera is usually 80. Try to define a static IP

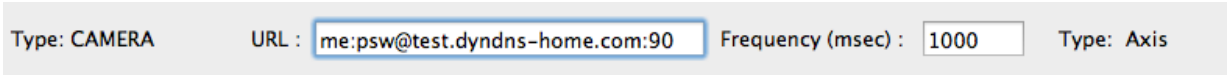
address for your camera (and not a DHCP address), because we don't want the address to change. Lets assume your fixed camera IP is 192.168.1.90.

You need to define the mapping like this:



The public TCP port is a port number you can choose (except for some special port numbers). In this example, we chose as public port number 90. If you have more than 1 camera, you need to choose a different public port number for each camera. (e.g. 91, 92, …).

Enter the URL with the correct port number in your project to be able to access your cameras from outside your local network.



Again, for security reasons, it is recommended that you activate the password protection for your camera.

Note : Some external networks or internet providers are blocking certain port numbers. So it is possible that your cameras will not always be accessible from outside. (In our example, if port number 90 was blocked, no camera access will be possible)

Using VPN:

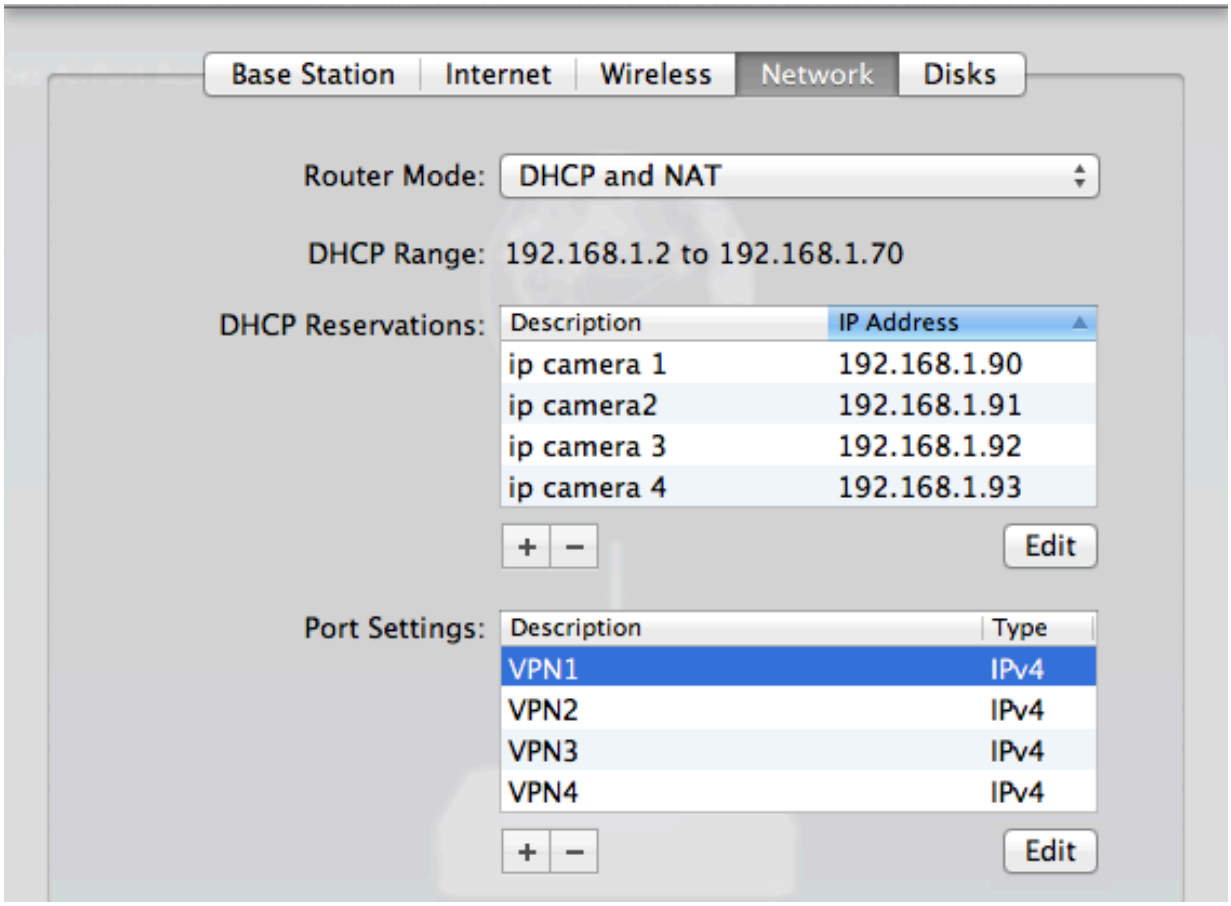
The big advantage of using VPN is that the connection is secure. Without the login and the password, you can not login into the VPN network, and other persons can not control your KNX devices via the internet.

Make sure your VPN server is configured correctly.
If your VPN server is embedded in your router, you probably don't need to configure extra ports.
If not, to Connect your VPN server to the outside world, you need to open ALL the following TCP and UDP ports in your NAT options from your router:

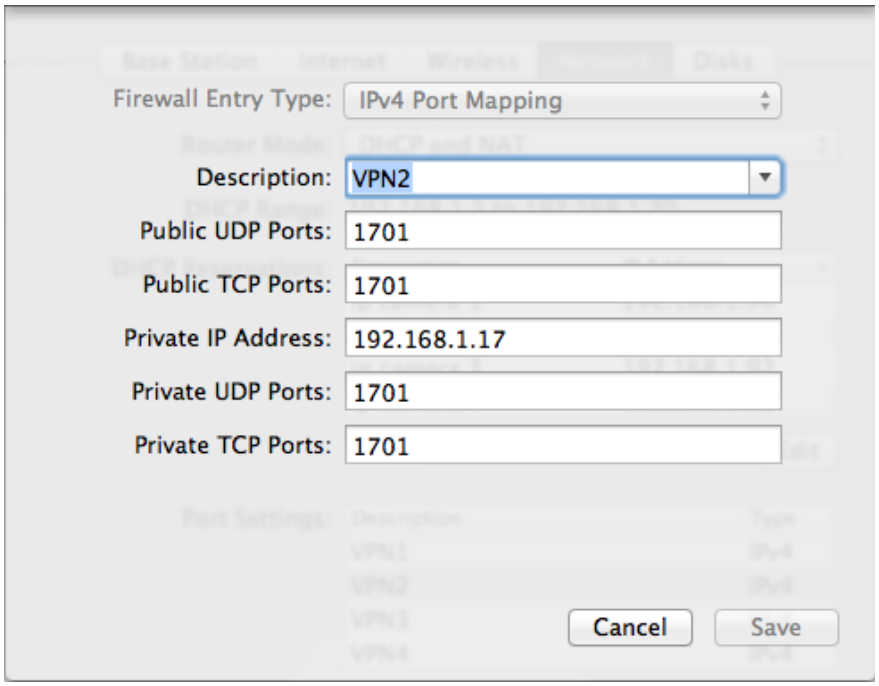
- 500
- 1701
- 1723
- 4500

and transfer/route each of them to the IP address of your VPN server.

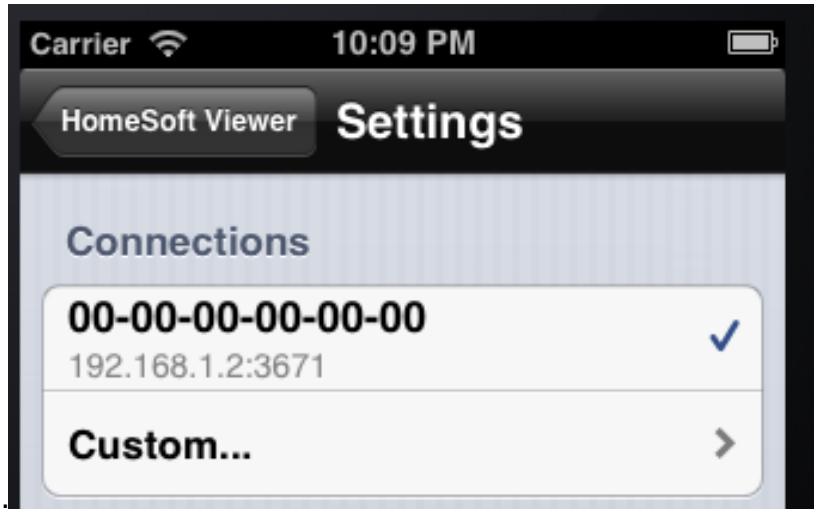
Our screenshot examples are from the Apple Time capsule:
Set the Router mode to use DHCP and NAT.
In the port settings, we need to add 4 entries (one for each port)



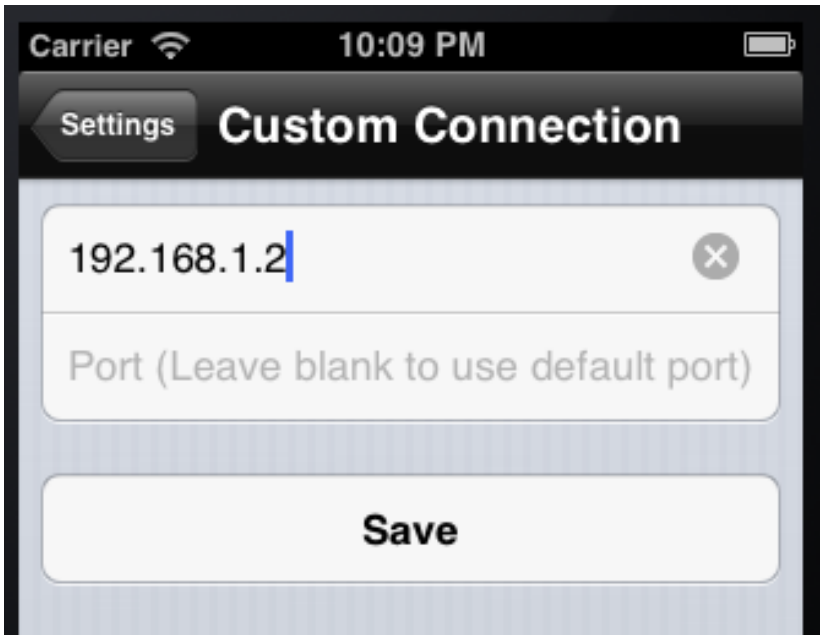
In our example, we show the setting to open the port 1701 and reroute all communication to the VPN server which is situated on our internal IP address 192.168.1.17



Once your VP connection is operational and active (on the server side and on your iOS device) , you need to configure the HomeSoft viewer using the CUSTOM connection in the settings. You will need the IP address of your KNX/IP device. This IP address is detected automatically if your iOS device is in your home network and can be found in your Connections



In our screenshot, The KNX/IP device has address 192.168.1.2 (and is using the default KNX port 3671). Remember this address, and go to the custom section. Enter the address and press the 'Save' button



The Homesoft viewer is now ready for controlling the KNX devices via VPN.

Note 1: This custom setting will work for both : VPN connections and local connections (When you are in your home Network).

Note 2: When using VPN, you don't need to do anything special for the IP cameras in your network.

Note 3: The build-in VPN connection from Apple will be lost every time your iPhone/iPad/iPod goes to sleep.

14.5. Project Locations and backups

The projects are stored in the following locations:

MacOSX:

Users/USERNAME/Library/Application Support/HomeSoft/Projects

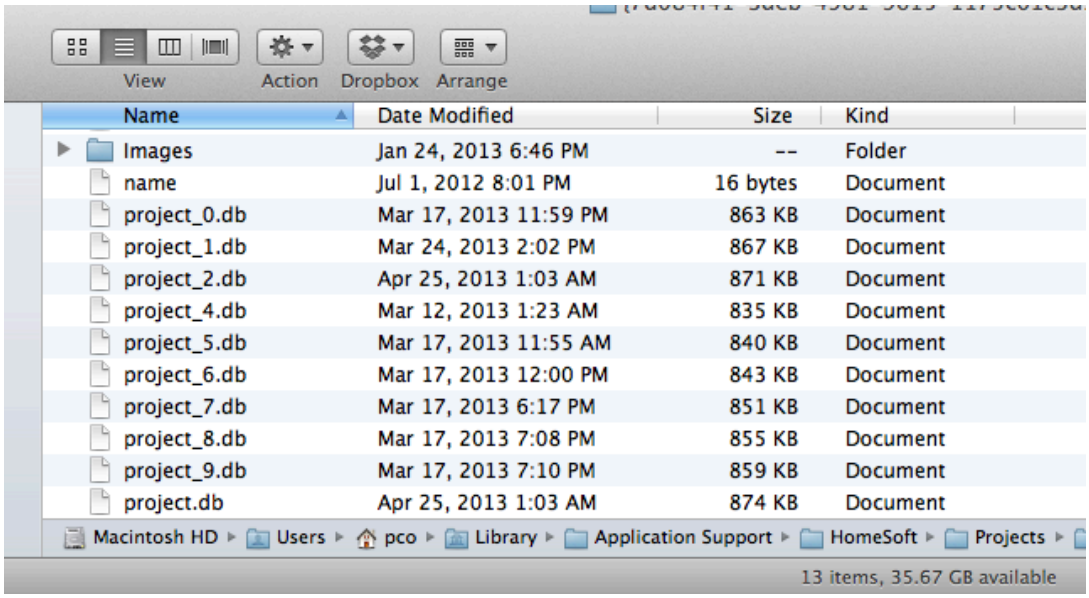
Windows:

C:\Documents and Settings\USERNAME\Application data\HomeSoft\Projects

Backup:

The latest project data is stored in one single file called project.db.
All images from the project are stored in the Images folder.

Every time you save your project, the previous version will be overwritten, but first a backup of the previous project will be taken. It will be named: project_0.db, project_1.db, … We will always remember the 10 last projects.

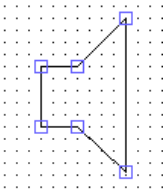


The current project is stored in project.db. The most recent previous version can be found in the project name just before the missing number. In this screenshot, you can see that project_3.db is missing. If you want to recover the previous version of your project, you can find it in project_2.db.

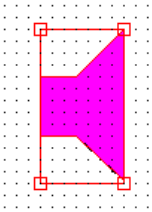
15. Examples

15.1. Creating (drawing) a small no sound loudspeaker object

15.1.1. The loudspeaker object:

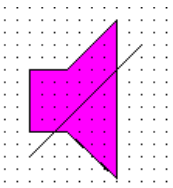


Select the path draw/edit tool.
Activate the grid (meta-G)
Draw the correct shape
The draw will stop automatically once you reach the start point again.
Draw it as big as you want, we can scale it afterwards.

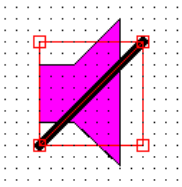


Go to the select tool, and select the created object.
Give it a color

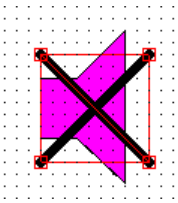
15.1.2. The cross



With the path draw/edit tool, draw a line from the bottom-left to the top-right.
Double click on the last point to stop the path editing.



Give it a border (e.g. 6 pixels)
Give it a color.



Now use the transform tool to rotate the line. Press the ALT key to keep the original, press the meta-key to rotate around the object midpoint.
Rotate the line 90 degrees.

15.1.3. Finishing

Now select all the created object, and put them in one group (Edit menu – group).
This will make it easier to select and move/transform.
Now use the transform tool to scale and/or position the created loudspeaker object.

Note that in order to select an entire group, you need to use the area selection (pressing the meta-key in select tool)

15.2. Creating a button in the background

In many cases, you want to be able to press on some area on your page, without the need of showing a button object.

You can find such an example in the iPhone demo project which is delivered with the software.

In most pages, pressing anywhere on the top part (not only on the little white house/home icon) will go to the home page.

To achieve this, we drag any button on the page.

Move and scale it to the correct size and position with the transform tool.

Double click on the correct action (in this case : goto start page), to apply that action to the button.

The last step is to select the button, and use the 'move to back' function (edit menu – arrange or right mouse click) to move it to the background.

15.3. Controlling your heating

15.3.1. Introduction

Note : This example is based on the Berker B.IQ device, but other devices operate in a similar way.

In most KNX heating control devices, you have the following parameters:

- The measured temperature
- The base temperature
- The Asked temperature
- The mode

The measured temperature is just the local temperature which is measured by the sensor inside your device.

The Asked (or sometimes called shown temperature) is the temperature which you ask for this room, and this is also the asked temperature that is shown on the display of your device. Normally, your device contains push buttons to increase or decrease this value.

The Base temperature is similar to the Asked temperature, but can be different. This is e.g. the case during the night. When your device switches to 'night' mode, the base temperature stays the same, but the asked temperature is reduces by a predefines amount of degrees. As an example: during the day, your base temperature equals the Asked temperature and is e.g. 20.5 degrees C. When at a certain time, your device switches to night mode, and the night mode was defined to be 5 degrees less than day mode your parameters will become : base temperature is still 20.5 degrees C, but the asked temperature switches to 15.5 degrees C.

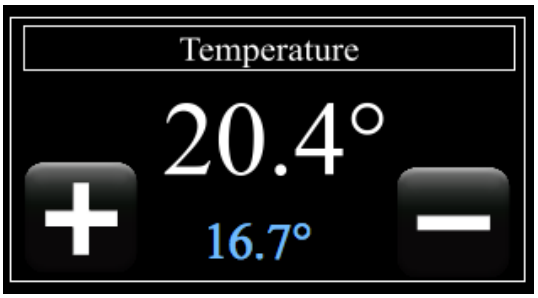
The Mode parameter is just a number allowing to switch to a different heating mode. The best example here is night-day mode.

So, if we want to control our heating, we need to use the correct parameters. This means:

- Always show the Asked temperature in your project, to know what temperature your heating is trying to reach.
- Always increase or decrease the Base temperature to increase or decrease the asked temperature. Do not Show the Base temperature in your project. This is a misleading value.

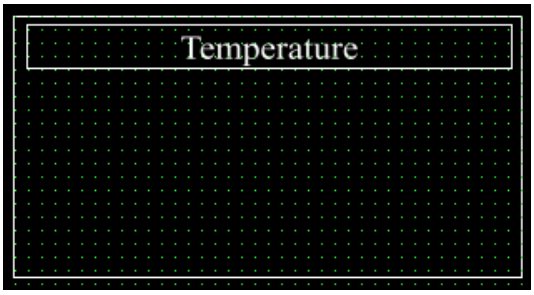
15.3.2. Implementation

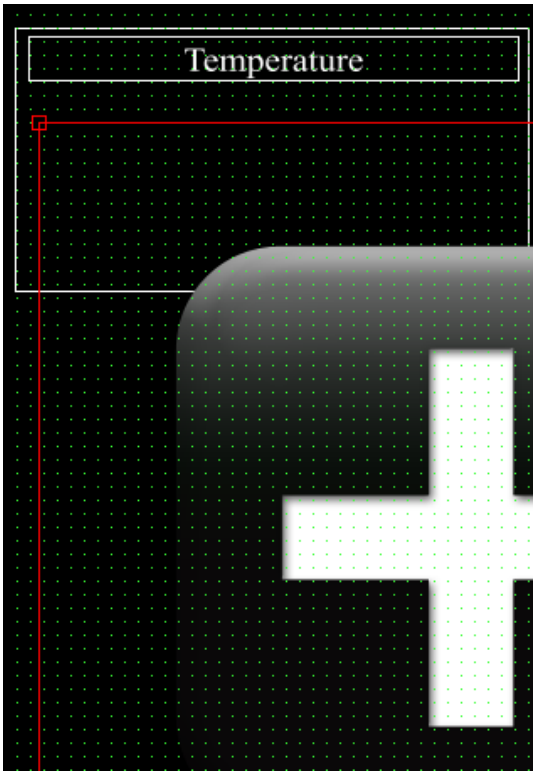
Lets go into detail to create the following example : I want to control my heating in my living, and the result should look like this:



The big white text is telling me the Actual temperature, the smaller blue text is the Asked temperature. On each side, there is a button, one to increase, one to decrease the Asked temperature.

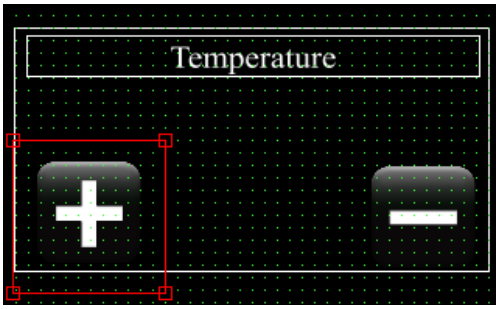
First create the static elements using the shape (rectangle) and the text tool



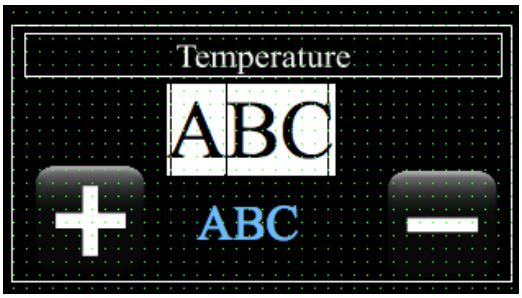


Now, drag and drop the + and the – button from the drag and drop single icon buttons onto your screen.

You will notice that the buttons are very big. Use the transform tool to scale down the size (don't forget to press the shift key to activate the proportional scaling) using the corner point.

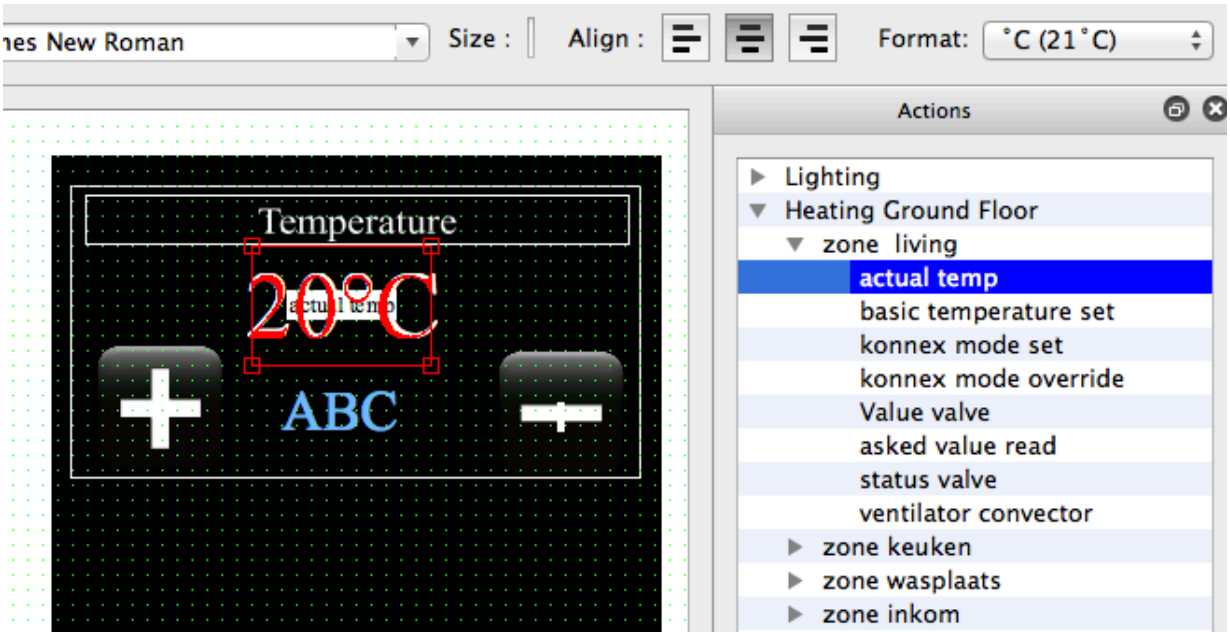


Position the buttons by activating the transform tool, and use your mouse or the arrow keys to move to the wanted position.



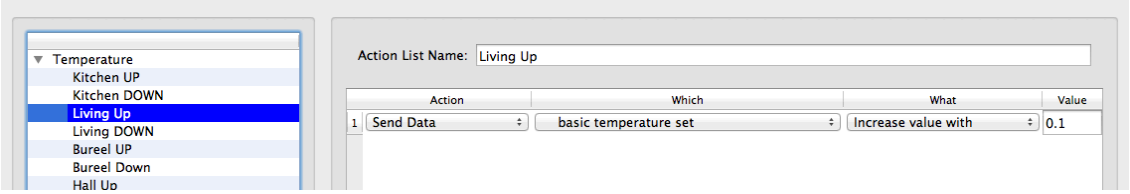
Now switch to the text tool, and create 2 text objects. One for the current temperature, one (smaller) for the Asked temperature. Switch to the selection/transform tool, and select the text objects one by one. Give them the correct color and size, and make sure the alignment is set to 'center'.

We now apply the correct Action to the text. Go to your actions dialog on the right, and look for the actual temperature parameter for your room. Make sure the correct (static) text object is selected, and double-click your action on the right. The action is now assigned you your text object. We just created a dynamic text object. Choose the correct formatting for your temperature. Do exactly the same for the bottom (blue) text, but now use the Asked temperature value of your room to connect to your text.



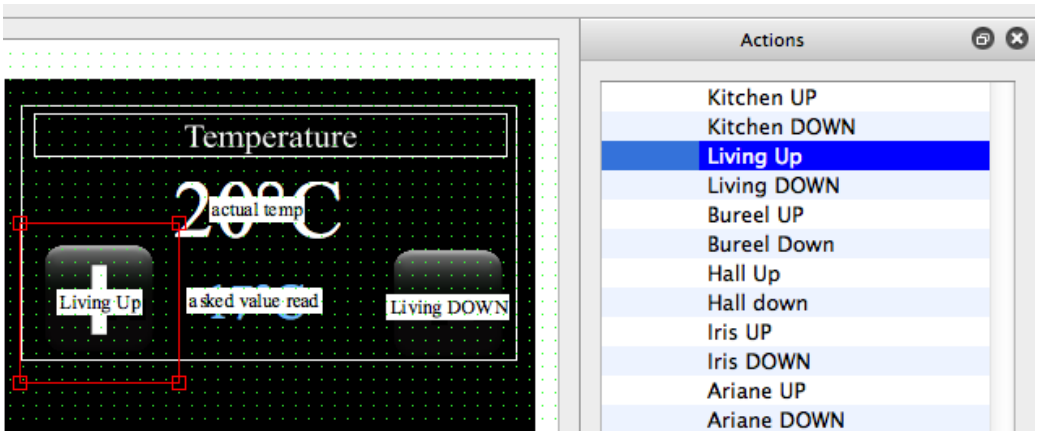
We are amost there. We sill need to attach the correct action to the + and the – button. We want to increase/decrease the base temperature with 0.1 degrees. To do this, we

first need to create 2 action lists. Go to the ActionLists section, and create a main group (e.g. temperatures). Select that main group, and add an action list. Give it a proper name (e.g. increase temperature Living) and add one entry in the action list.



Select 'Send Data' as action, and select the base temperature parameter from the correct room in the 'Which' column. In the What column, select the increase value, and enter the amount to increase in the Value column.

Do exactly the same to create an action list to decrease the temperature.
Now, go back to edit mode, and select one of the buttons. In the Actions section on the right, you will now find the 2 new action lists we just created under 'My Action Lists'. Double click on the correct action to attach the action to the button. Do the same for the other button.



15.4. Creating a dynamic button that can control multiple devices

15.4.1. Introduction

As explained in the dynamic buttons section, a dynamic button (which has different states and icons) can only be linked to one single KNX device. The state of this KNX device will determine which icon will be shown in the button.

But in some cases, we want to send more messages to the KNX network when pressing a button, and we also want the button to be dynamic.

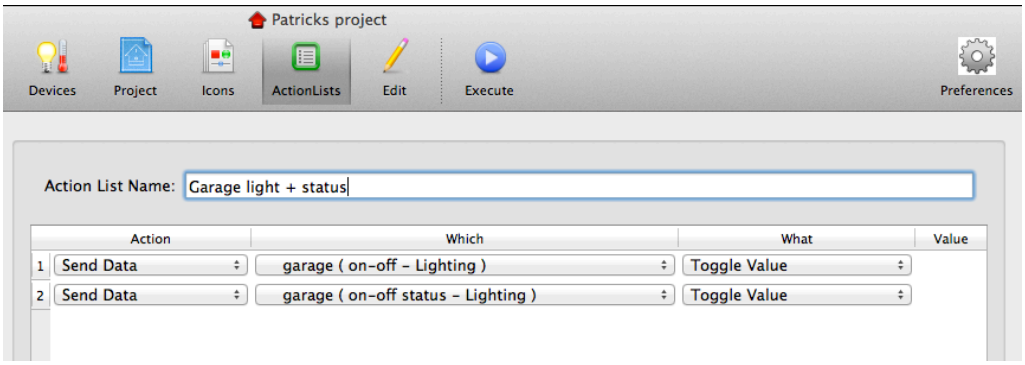
An example for this, is switching on/off a light, but we also want change the light status (led) . This light status led has a different KNX address.

As an example, we assume that our light has address 0-0-15 and our light status led has address 0-3-15.

Both have type On-Off

15.4.2. Implementation

In the HomeSoft software, the only way to change 2 KNX devices with one button, is using an action list. So first, we create an action list that will change both devices.

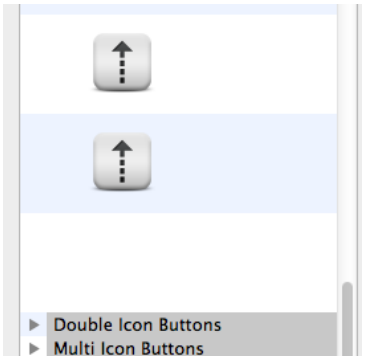


But if we assign this action list to a button, there will be no status change for the button, because the button doesn't know which device status to show for an action list. (See 9.1.2 : don't attach an action list to a dynamic button)

The trick here is to use 2 buttons. First you place a double icon button and attach the light device to that button. The button will then show the current state of this light. Then we place a second **transparent** button on top of this light button. You can find a complete transparent .png file here:

http://upload.wikimedia.org/wikipedia/commons/8/8c/Transparent.png

Download this png image, and add it to your icons list. The transparent icon will also be automatically added to your drag and drop (single Icon) buttons. Remember that , as this icon is fully transparent, you will just see an empty place in the list.



Drag and drop the transparent (invisible) button on your page, and scale and position this button on top of your previously placed light button. As the icon is transparent, you will still see the underlying light button. Now attach the action list to this transparent button. Because this transparent button is on top, pressing at this position will execute the action list, and if the action list changes the status of the light, the light button will change.

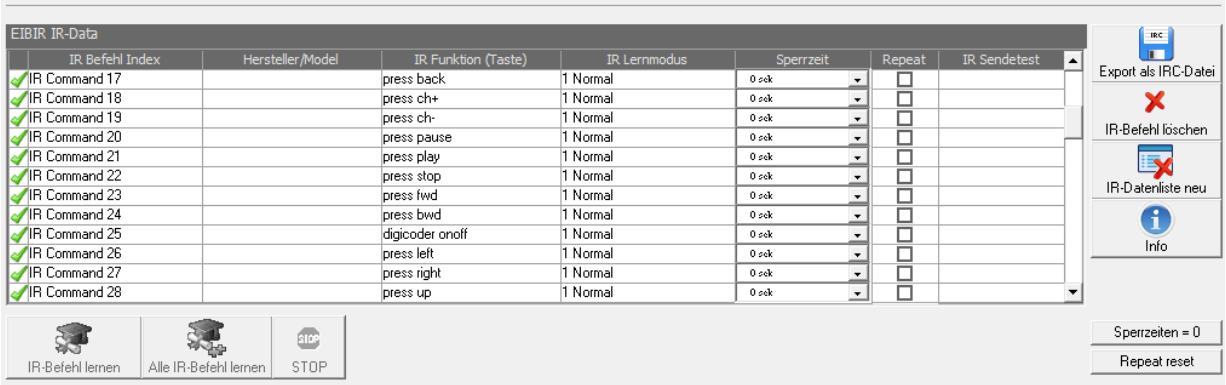
15.5. Controlling your Video and Audio with an KNX InfraRed Device

The HomeSoft sotware can only control IR devices if your KNX network contains a KNX/IR module. The KNX/IR module can receive KNX messages, and these messages will be translated to an infrared signal that can control any Infrared based system, like TV, Amplifiers, radio, DVD player, Home cinema, …

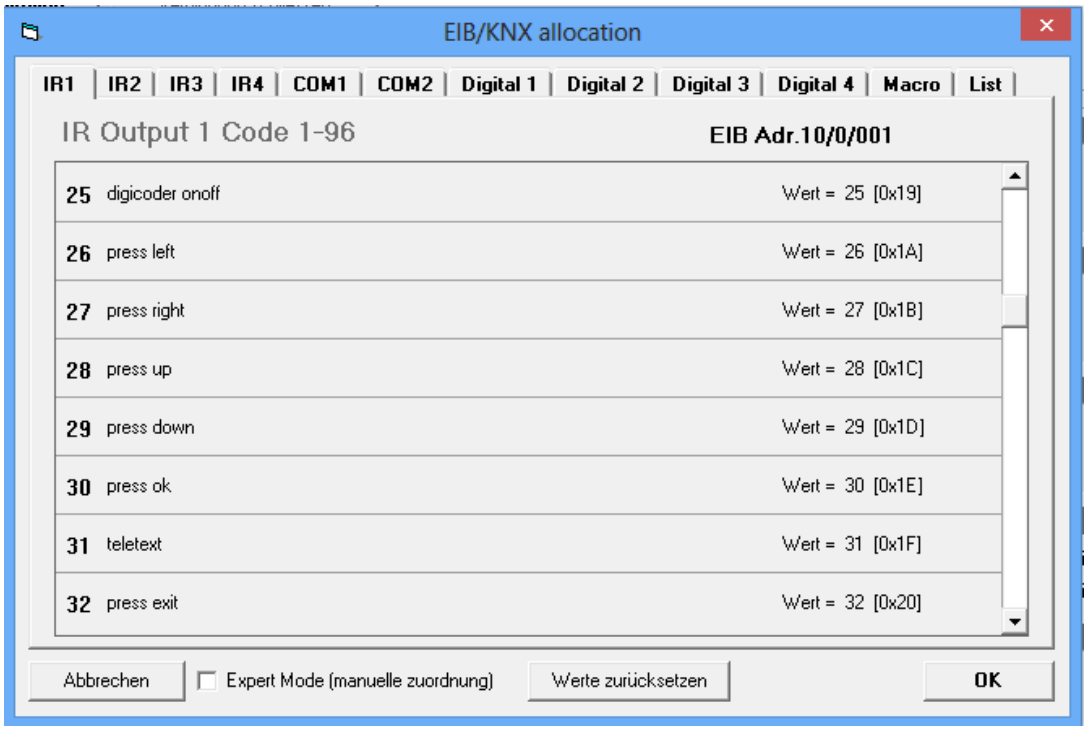
This explanation is based on the Komtech KNX/IR module. This module can send IR signals, but can not get any feedback of the current value/status of IR controls.

The Komtech software is easy to use, and basically consists of 2 steps:

1: Learning the IR commands. You need to 'learn' all the IR command you will need in your project. Use all your existing remote controls to send IR signals to your Komtech device, and they will be registered into the software. (You need an RS232 link between your computer and the Komtech KNX/IP device to do this).

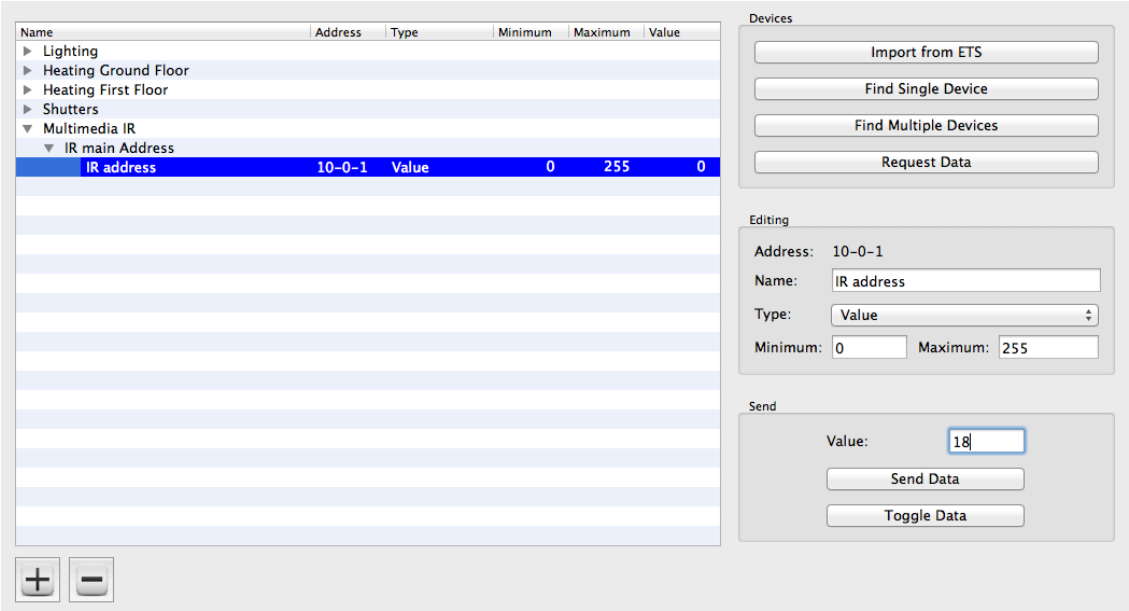

EIBIR IR-Data
IR Befehl Index
Hersteller/Model
IR Funktion (Taste)
IR Lernmodus
Sperrzeit
Repeat
IR Sendetest
IR Command 17 press back 1 Normal 0 sek
IR Command 18 press ch+ 1 Normal 0 sek
IR Command 19 press ch- 1 Normal 0 sek
IR Command 20 press pause 1 Normal 0 sek
IR Command 21 press play 1 Normal 0 sek
IR Command 22 press stop 1 Normal 0 sek
IR Command 23 press fwd 1 Normal 0 sek
IR Command 24 press bwd 1 Normal 0 sek
IR Command 25 digicoder onoff 1 Normal 0 sek
IR Command 26 press left 1 Normal 0 sek
IR Command 27 press right 1 Normal 0 sek
IR Command 28 press up 1 Normal 0 sek
Export als IRC-Datei
IR-Befehl löschen
IR-Datenliste neu
Info
IR-Befehl lernen
Alle IR-Befehl lernen
STOP
Sperrzeiten = 0
Repeat reset

2: Assign all needed (and learned in step 1) IR command to a KNX address and a value. Every KNX address can send 256 different values, so you can assign 256 IR commands to just one KNX address. This should be sufficient for all your IR controls. In our example 9 see screenshot), we will use the KNX address 10/0/1. Example : If we want to switch on/off our digicoder, we will need to send a value of 25 to the KNX address 10/0/1 (see further)

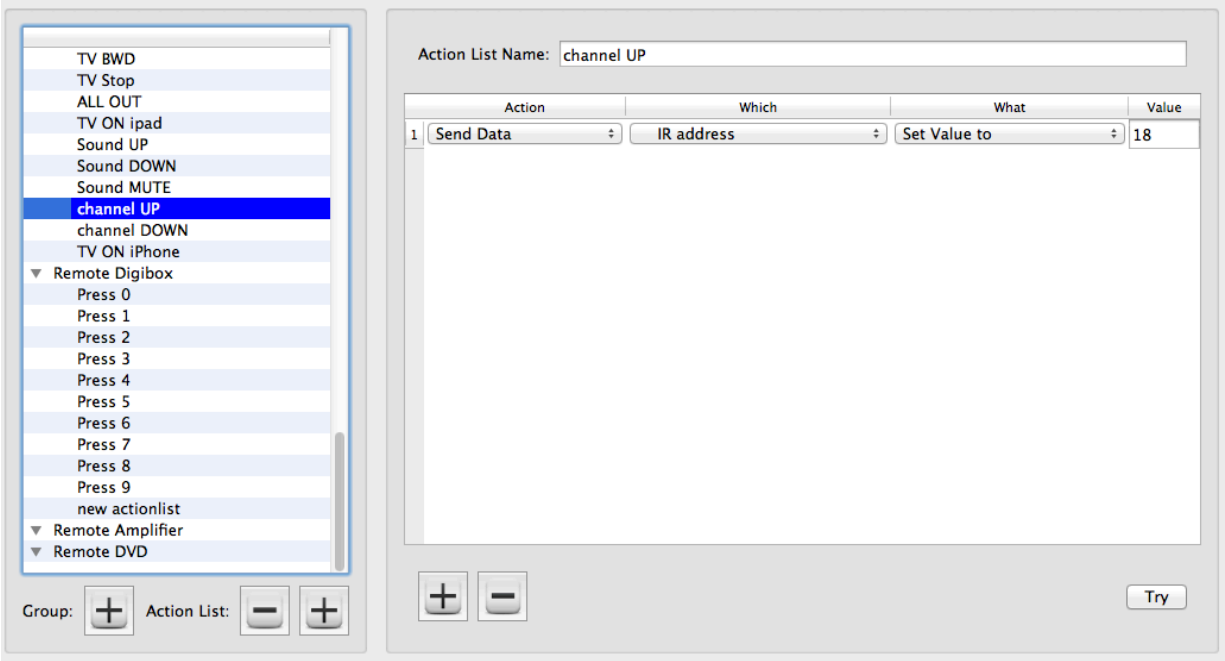


Once your KNX/IR device is configured and operational, we now need to use this data in our HomeSoft Editor project.

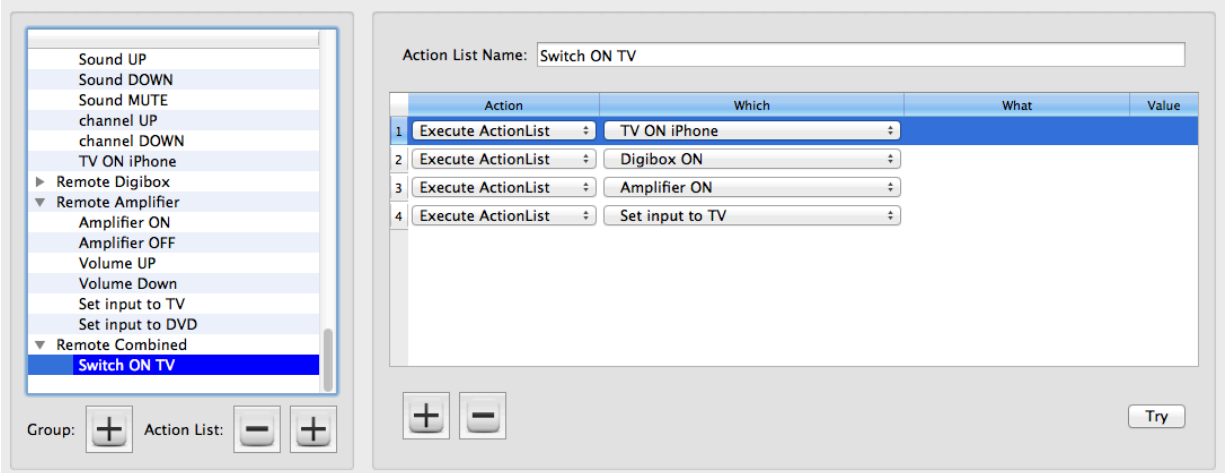
First we need to add the KNX address into our devices list (use the + button in the lower left corner) , and give it a good name. In our example, we will call the device : IR address. Remember that our KNX address was 10/0/1. You can immediately test out if it works, by sending a certain value to the IR device. In our screenshot example, we will send a value of 18 to the KNX/IR device, which had been defined as 'Channel UP'.



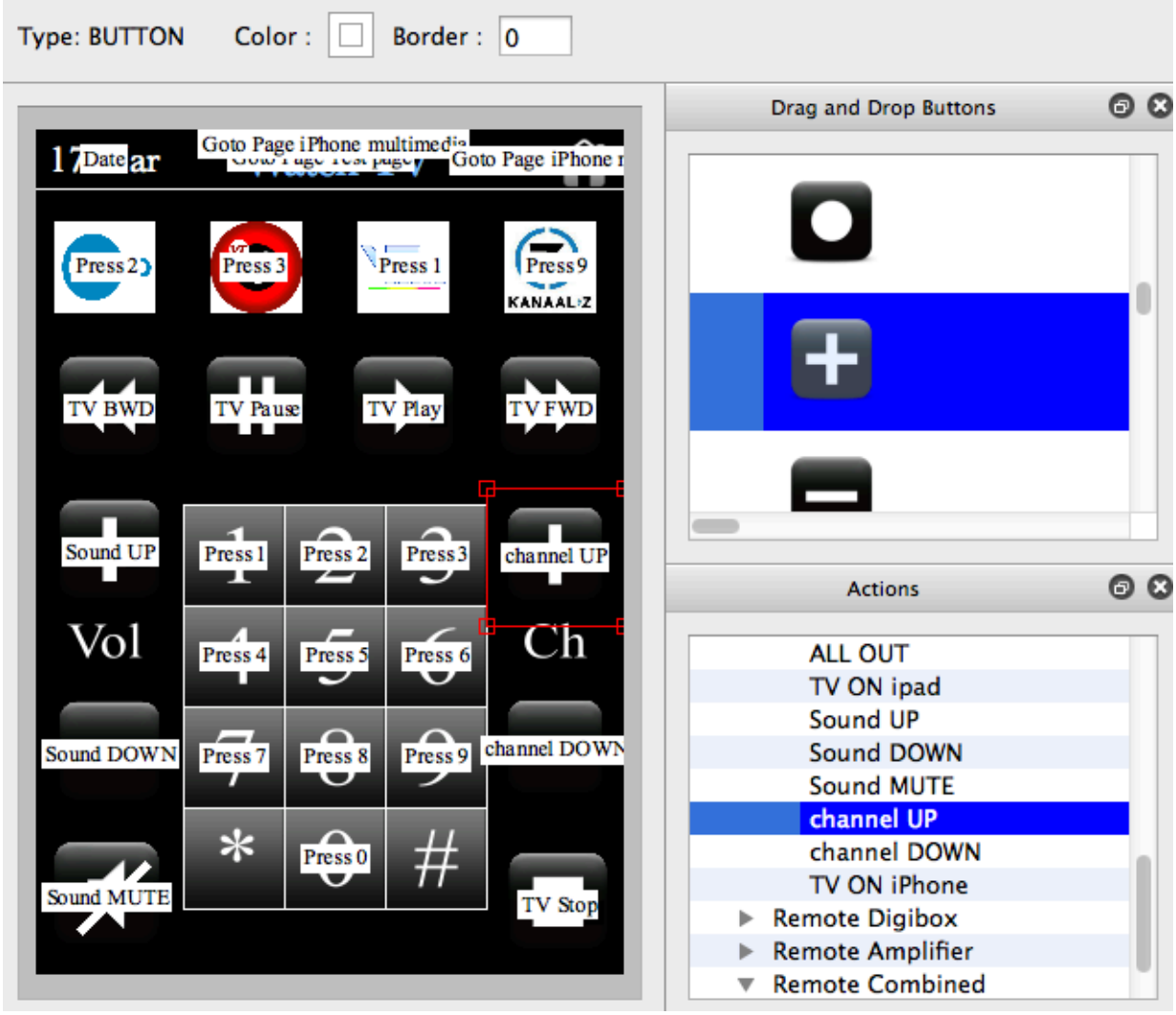
If we want to use IR control in our project, and assign these to some buttons, we can only do this by using action lists and we need to create a separate action list for every control. In our example, we create an action list (with one action), called Channel UP, and define the action to send a value of '18' to the 'IR address' device. We do this for all IR controls we need.



You can also define action lists combining different IR actions, like e.g. if you want to have a button in your project to start watching TV, you need to switch on your TV, your digicoder, your amplifier, and set the correct Audio input channel to TV. You can call already defined action lists, and combine them into a new action list.



The last step is to assign our action lists to some buttons. Go to the Edit mode, position your buttons onto your page, and assign the correct action lists to the buttons.



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